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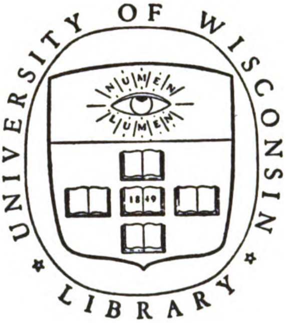

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PEACE HANDBOOKS

Issued by the Historical Section
of the Foreign Office.

VOL. XXII

PACIFIC ISLANDS

- 139. DISCOVERIES AND ACQUISITIONS
- 140, 143. GALAPAGOS AND JUAN FERNANDEZ ISLANDS
- 141, 142. MALPELO, COCOS, AND EASTER ISLANDS
- 144. BRITISH POSSESSIONS
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- 147. NEW HEBRIDES

LONDON:
H.M. STATIONERY OFFICE

1920.

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Editorial Note.

In the spring of 1917 the Foreign Office, in connection with the preparation which they were making for the work of the Peace Conference, established a special section whose duty it should be to provide the British Delegates to the Peace Conference with information in the most convenient form—geographical, economic, historical, social, religious and political—respecting the different countries, districts, islands, &c., with which they might have to deal. In addition, volumes were prepared on certain general subjects, mostly of an historical nature, concerning which it appeared that a special study would be useful.

The historical information was compiled by trained writers on historical subjects, who (in most cases) gave their services without any remuneration. For the geographical sections valuable assistance was given by the Intelligence Division (Naval Staff) of the Admiralty; and for the economic sections, by the War Trade Intelligence Department, which had been established by the Foreign Office. Of the maps accompanying the series, some were prepared by the above-mentioned department of the Admiralty, but the bulk of them were the work of the Geographical Section of the General Staff (Military Intelligence Division) of the War Office.

Now that the Conference has nearly completed its task, the Foreign Office, in response to numerous enquiries and requests, has decided to issue the boois for public use, believing that they will be useful to students of history, politics, economics and foreign affairs, to publicists generally and to business men and travellers. It is hardly necessary to say that some of the subjects dealt with in the series have not in fact come under discussion at the Peace Conference; but, as the books treating of them contain valuable information, it has been thought advisable to include them.

It must be understood that, although the series of volumes was prepared under the authority, and is now issued with the sanction, of the Foreign Office, that Office is not to be regarded as guaranteeing the accuracy of every statement which they contain or as identifying itself with all the opinions expressed in the several volumes; the books were not prepared in the Foreign Office itself, but are in the nature of information provided for the Foreign Office and the British Delegation.

The books are now published, with a few exceptions, substantially as they were issued for the use of the Delegates. No attempt has been made to bring them up to date, for, in the first place, such a process would have entailed a great loss of time and a prohibitive expense; and, in the second, the political and other conditions of a great part of Europe and of the Nearer and Middle East are still unsettled and in such a state of flux that any attempt to describe them would have been incorrect or misleading. The books are therefore to be taken as describing, in general, *ante-bellum* conditions, though in a few cases, where it seemed specially desirable, the account has been brought down to a later date.

G. W. PROTHERO,
General Editor and formerly
Director of the Historical Section.

January 1920.

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I. THE GREAT AGE OF EXPLORATION (TO ABOUT 1648)

§ i. *Earliest Explorers*

THIS period commences with Núñez de Balboa's arrival on the Pacific coast of the Isthmus of Darien in 1513. It includes all the pioneer work which made clear the chief facts about this ocean and its shores (except in the extreme south and in certain island groups, some of which were, however, of great importance); and it ends with that pause in the history of exploration about the middle of the seventeenth century which curiously corresponds to the pause in General European history, marked by the end of the Thirty Years' War. In this period there was abundance of discovery, but hardly any settlement, away from the coasts of the main land-masses of America and Asia which border the Pacific. Not even the great island-continent of Australia was yet touched by European or other civilized colonization; and many of the earliest discoveries, being kept as far as possible close national secrets, tended to become obscure, and in some cases to be actually forgotten, even by the fellow-countrymen of the original discoverers.

The China Sea, that westernmost compartment of the Pacific, more or less enclosed by fringing islands and islets, was entered and navigated (along the shores of the Celestial Empire) by the Polos and other European agents of overland expansion in the thirteenth and fourteenth centuries. But the Pacific, as we understand it, was first disclosed to Europe by Vasco Nuñez de Balboa, the Spanish conquistador, when, twenty-one years after the discovery of the New World, he forced his way across the slender but mountainous isthmus separating the 'Great South Sea' from the Atlantic.

Columbus, before the end of his life (perhaps by 1505), had become convinced that the lands he had found were not (as he had formerly believed) parts of Asia, or an East Asian Archipelago, but new-found regions between which and Eastern Asia there lay, in all probability, another sea. The truth of this suspicion was proved by Balboa.

§ ii. *Magellan and his Successors*

This new *Mar del Sur* or Sea of the South, was first explored and traversed, neither by Colon nor by Balboa, but by Ferdinand Magellan (Fernão de Magalhães), the chief, except Columbus, of all explorers (1519–22).[1] Like Columbus he was by origin a stranger in Spain, though one of the greatest of Spanish Empire-builders; like Queiros, after him, Magellan was 'a Portugal in all save loyalty'. Discovering in Magellan's Straits (the 'Straits of the Eleven Thousand Virgins') that south-west passage from the Atlantic to the waters beyond, which Spanish enterprise had already for some time been seeking, and entering the South Sea on November 28, 1520, he crossed the ocean, which he named the Pacific, 'for during this time we met with no storm'[2] —a journey of full 4,000 leagues, accomplished in three months and twenty days. His course was from the far south-east, almost 53° S. lat. (at the western outlet of Magellan's Straits), to the tropical north-west where he struck the Ladrones and Philippines between 10° and 20° N. In this first crossing of the sea, 'beyond reach of man's mind for vastness', no land was discovered, except two uninhabited islets. The course must have been close to several of the famous Pacific groups, but none were sighted; or, if so, no account was allowed to appear.

Pizarro, Saavedra, Loaysa

Meanwhile the Spanish conquest of Mexico (1519–21) gave to Europe a new and extensive seaboard on the Pacific; and from this base much of the subsequent Spanish exploration was planned and conducted. In 1525–27 the Pacific coast of South America was explored for a considerable distance to the south of the Darien Isthmus by Francisco Pizarro—in preparation for the subsequent attempt at conquest which resulted in the subjugation of Peru (1531–32). Four years after the reappearance at Seville of Magellan's *Vitoria*, the first ship which 'had girdled earth in one continuous round', fresh Pacific explorations were organized by Hernando Cortez, the conqueror of Mexico. Alvaro de Saavedra was sent in 1526 from Mexico to the Moluccas. To some extent he 'followed Magellan's track'. He discovered the Carolines and a part of the coast of New Guinea, another section of which had been already found in the same year by the Portuguese, Jorge de Menezes, who perhaps named it New Guinea.[1]

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[1] The first circumnavigator was J. Sebastian del Cano, one of Magellan's captains, who, after Magellan's death, brought one of his ships, the *Vitoria*, back to Seville.

[2] According to other authorities the name 'Pacific' was applied to the Ocean in consequence of the account of it given to Balboa by the son of the Chief of Camogre, who described it as singularly free from storms.

The unlucky but important expedition of Garcia de Loaysa two years later, was expressly ordered by the Emperor-King whom we call Charles V (but who was Charles I of Spain, and who in this was acting as King of Spain) to pursue the course of its predecessor. Loaysa made his way from the Atlantic to the Pacific by Magellan's Straits. His fleet was then dispersed by storms; but one of the vessels reached the Pacific coast of Mexico, another the Philippines; thus the first 'circumnavigation' of South America was made (1528).

The Spanish attack on Chile in 1535, though as an attempt at further colonial expansion from the Peruvian base it was unsuccessful, extended Spanish (and European) knowledge of the American Pacific coast a long way farther south; and continual steady advance was made in this field in the next few years (1537–42).

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[1] To say nothing of the possibility of an earlier Portuguese discovery, by Antonio d'Abreu in 1511. The name of New Guinea is often thought to have been given by Ortiz de Roda, or de Retez, in 1546.

§ iii. *First Records of Australia*

But now we get the first certain glimpse of Australia. It was about 1536 that the north-western corner of that continent began to appear in French maps of the Dieppe school of Cartography under the name of Great Java (*Java la Grande*). The earliest discovery of the *Terra Australis* was not necessarily French; the Portuguese are perhaps even more plausible claimants. The Dieppe map-makers of the fourth decade of the sixteenth century were among the foremost exponents of new geographical knowledge at this time, and recorded Spanish and Portuguese results more extensively than any other. France had only just begun (from about 1520) to take an active part in the new oceanic expansion of Europe. But this matter cannot at present be decided, and in any case it may be excluded from any intimate part in Pacific exploration and history.

§ iv. *Further Spanish Exploration*

Between 1537 and 1542 Lower California was discovered; the western coast of South America was again surveyed, and more carefully examined, in two expeditions; and the Pacific seaboard of North America was explored as far as San Francisco and some way beyond (to 44° N.) by a series of energetic ventures, all due to Spanish initiative.

It was also perhaps in 1542–45 that the Spanish sea-captain Ruy López de Villalobos and his pilot, Juan Gaetano, sighted the Carolines and some of the Hawaiian Islands, to which Gaetano apparently returned in 1555. This leading island-group of the North Pacific was probably visited in later times by Gaetano's countrymen; and the Spanish Government at home and its lieutenants in America may have been acquainted with the 'Sandwich' archipelago centuries before Cook. But the secret, if such there was, was kept (with unusual success) by Spanish seamen and officials, and until Cook's day the world, as a whole, did not share in this knowledge.

From about 1555 we come to a time of marked advance and valuable results in Pacific exploration, and to the earliest attempts at settlement in the island groups. This, like all that had preceded east of Australia, was the work of Spanish pioneers. First, as noticed above, Juan Gaetano more fully discovered the Hawaiian Islands, which he named *Islas de Mesa*, in 1555. Next, in 1564–65, Miguel López de Legaspi, crossing from America, founded the first Spanish colony in the Philippines. Again, in 1565, a Spanish Franciscan friar, Andres de Urdañeta, first traversed the Pacific from Asia to America. He sailed from the Philippines, by way of Japan, to Mexico. This was apparently the earliest European opening of this valuable route; and it proved the beginning of a regular, though slender, traffic from Eastern Asia (including the East Indies) to Spanish America, answering to that already established in the reverse direction. Lastly, in 1567, Alvaro de Mendaña de Neyra discovered portions of several island-groups in the tropical Pacific (the Ellice Islands, the Lord Howe Islands, and others, and he even explored some of the chief islands of the Solomon Archipelago (e. g. Ysabel Island, San Christoval, and Guadalcanar).[1] He wished to plant a permanent settlement in the Solomons (which might have led, if it could have survived, to a Spanish discovery and colonization of Queensland); but he could not carry his followers with him.

§ v. *British Explorations*

So far, all Pacific exploration had been Spanish. England entered the Pacific field with Drake (1577–80), and revisited it with Cavendish (1586–88); but neither of these famous circumnavigators really added new ground to what Spanish mariners and conquerors had already opened up. Drake, however, considered himself the first explorer of what we know as Northern California; he proclaimed an English annexation of that country, and founded the first English claims in that part of America. But all his ground in this region had already been surveyed by his Spanish predecessors. It was far more important that his expedition ascertained that Tierra del Fuego was no part of a vast continent, but a small archipelago of islands, south of which 'the Atlantic and the South Sea meet in a most large and free scope'. The same fact was clearly recognized by the Spanish Governments of Peru and Mexico; Pedro Sarmiento's expedition brought further assurance on this point in 1580. But no rounding of Cape Horn was yet accomplished.

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[1] Mendaña, or at least popular Spanish opinion, wished to suggest boundless wealth for his chief discovery; hence the name *Solomon*.

§ vi. *Dutch Explorations*

Holland, the new 'Dutch Republic', made its first Pacific appearance with the circumnavigator Oliver van Noort (1598–1601). At the same time the Hollander Dirck Gerritsz, after passing through Magellan's Straits, was driven by storm into high Antarctic latitudes, reaching 64° south, and seeing portions of Antarctica. Gerritsz thus reached slightly beyond Cook's farthest south.

It is worth notice, perhaps, that the straits separating Australia from New Guinea, which we call after Torres, are marked upon Abraham Ortelius' (Flemish) *Orbis Terrarum* of 1589, eighteen years before Torres passed through them. With Ortelius Dutch cartography came to the front, as in his lifetime Netherland exploration and colonial expansion became prominent.

§ vii. *Mendaña, Queiros, and Torres*

Mendaña (cf. § iv) endeavoured to return to the Solomon Islands with a larger force, properly provided, in order to colonize them. He had failed to discover, as he had hoped, a rich continent at no impracticable distance from Peru; but he rightly believed his new-found lands to be the outposts of the Austral

Continent; only, like others, he magnified that Australia far beyond the truth. Mendaña obtained his colonizing licences in 1574; but a series of unlucky chances delayed his second Pacific venture until 1595. On this disastrous expedition he discovered the Marquesas and missed the Solomons, but found the Santa Cruz group, where he tried to establish his colony. Within two months he died here; and the settlement was abandoned. His chief pilot, Pedro Fernandes de Queiros (by origin a Portuguese, like Magellan), set out with the remnant of the expedition for the Philippines (where Manila had already made a beginning), seeking in vain for the Solomons on the way, but succeeding in rediscovering some of the Carolines.

Queiros convinced Philip II of the probability of a great southern land screened by the islands found by Mendaña and himself, and lying not far behind them. Of this Australian conception Mendaña and he were perhaps the first clear exponents. In 1605 he sailed from Peru with Luis Vaez de Torres as his chief pilot. He discovered a number of the islands of the Low Archipelago, east of Tahiti; he has been credited, but wrongly, with the earliest European landfall at Tahiti itself (supposed to answer to Queiros' *Sagittaria*); and he made important discoveries in the New Hebrides, especially the islands of Espiritu Santo, Aurora, and Pentecost. This *Austrialia del Espiritu Santo* he believed to be the southern continent of his theories (1606). Queiros' pilot, Torres, struck off to the west, coasted along the south of the Louisiade group and the south of New Guinea, threaded the straits now named after him between New Guinea and Australia, saw a little of the north of Australia, and thence made his way to the East Indies (1607).

§ viii. *Dutch Exploration of Australia*

At this very time began Dutch exploration of Australia from the north-west. Saris in 1605–6, Dirck Hartog in 1616, Edel and Houtman in 1619, and other explorers of the same nationality in 1622 and 1627 in the *Leeuwin* and the *Guld Zeepard*, opened up part of the northern and southern shores, and the whole of the west and south-west of New Holland—as far as the Great Australian Bight of present geography. The names of Dirk Hartog Island, Edel Land, Cape Leeuwin, Houtman Rocks, and Nuyts' Archipelago still preserve the memory of these advances.

The Netherlanders' expedition of 1605–6, however, had the unfortunate effect of favouring the misconception of a land connexion between New Guinea and the main Australian land. Torres Straits were missed by Saris; and, although Torres made his great discovery in the next year, the meaning of this was not generally understood. Until Cook's more detailed exploration the old error continued to exist.[1]

§ ix. *Speilbergen, Lemaire, and Schouten*

Joris van Speilbergen, in his able and successful circumnavigation of 1614–17, achieved no Pacific discoveries, though he won brilliant naval and other successes. But the famous voyage of Lemaire and Schouten (1615–17), which was both a Pacific enterprise and a circumnavigation, did unquestionably affect the knowledge of the Pacific and advance Dutch claims therein. By this expedition the way round Cape Horn [2]—a route already recognized as existing and feasible from the time of Drake and Sarmiento (1579–80)—was actually sailed over and so properly 'discovered'. Outlying islands to the northward of the Tonga group were also sighted; and New Ireland was entered as a Dutch discovery, but only as a supposed promontory of New Guinea, whose north coast was reached at much the same points where Spanish explorers had reached it in 1544–46.

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[1] All this perhaps does not belong to Pacific exploration proper, although it leads on to important Pacific developments.

[2] Properly *Hoorn*, after the town in North Holland.

§ x. *Van Diemen and Tasman*

Dutch Pacific exploration, like Dutch colonial expansion in general, reached its highest point in the organizing enterprise of Antony van Diemen, and in the voyages of Abel Janszoon Tasman, who shares with Hudson the claim to be the greatest of the maritime explorers of the seventeenth century. In his first 'South-Land' expedition of 1642–43, starting from Batavia in Java, the head-centre of Dutch power in the East Indies, Tasman discovered the south-west, south, and south-east coasts of Tasmania and the west shore of New Zealand, and coasted this 'Staaten-Land' (which he perhaps imagined as joined to the Staaten-Land of Lemaire and Schouten near Cape Horn) almost from lat. 42° S. in the South Island to the extreme north of the North Island (Cape Maria van Diemen, as he named it) in 34½° S. He passed the western opening of Cook Straits, but did not realize the full importance of this passage. Thence he worked north-east to the Tongas, and sighted some of the Fijian Islands, none of which had been previously visited by Europeans. Finally, Tasman returned to Java by the north of Australia, coasting part of New Ireland and New Britain, both of which he took for outlying parts of New Guinea. The insular nature of the main Australian land-mass was thus proved. Van Diemen organized North Pacific exploration, with a view both to its scientific value and to the prospects of Dutch colonial empire, trade, and influence in the East. In 1639 he despatched Tasman to explore for 'islands of gold and silver', supposed to lie east of Japan. On this expedition the navigator improved Dutch and general European knowledge of the Philippines, rediscovered and mapped the Bonin Islands, ranged much of the North Pacific, and touched at Japan and Formosa. Tasman's second 'South-Land' voyage in 1644 led to a more careful exploration of the Gulf of Carpentaria and to other work, but not to Pacific exploration proper. Knowledge of the south-west Pacific and of

Australia remained as Tasman left it till Cook's first voyage in 1768–79.

De Bries and Schaep, sent out by Van Diemen from Batavia, explored the North Japanese island of Yezo, discovered the Kuriles and Sakhalin, examined a great part of the eastern coast of the latter (to 49° N.), and navigated the Sea of Okhotsk.

§ xi. *Russian Enterprise*

The arrival of the first Russian pioneers on the shores of Eastern Asia, about 1639, certainly belongs to Pacific history, though often neglected in this connexion. The Russian advance across Northern Asia was wonderfully rapid; they only began to push far into 'Sibir' about 1581; fifty-eight years later they had reached the Sea of Okhotsk, and painfully explored much of the north-east of the Old World eastward of the Lena. In 1648–9 Russian enterprise achieved its most brilliant Pacific success. The Cossack leader, Simon Dejnev, then discovered the strait to which Vitus Bering in the next century gave his name. Dejnev's work, like so much of the early Russian pioneer work, was almost totally ignored at the time; a tardy and partial justice has lately bestowed his name upon the eastern extremity of Siberia, of Asia, and of the Old World.

II. TRANSITION, 1648–1787

(*a*) *The Pause*, 1648–1763

From the middle of the seventeenth century there was, in exploration as in many other fields, a notable slackening of energy for a time, until the modern scientific period of discovery opened, and the recent developments of colonial expansion and acquisition began. The era of the Puritan Revolution and of the Peace of Westphalia marked a certain satiety in those European outward movements which had accomplished so much since the days of Prince Henry of Portugal.

It seemed enough to develop the enormous fields which had been won—at least in the Oceanic world.

Both the French and the Russians, however, continued their colonial advances in North America and Northern Asia; it is only with the latter that Pacific history in this period (1648–1763) has any concern. From about 1650 Russian pioneers began to open up the Kamchatka Peninsula, with its important Pacific sea-board; and from the end of the century (*circa* 1697), with the expedition of Atlasov, this region, as large as Britain and exactly in the same latitudes, began to be effectively penetrated by Russian enterprise. It formed one end of a North Pacific bridge or ferry to America, now first used by a civilized race, but perhaps utilized in prehistoric time by that migration which brought the first ‘American Indians’ from ‘Tartary’. Vitus Bering, a Dane in the service of Peter the Great and his successors, examined the coast of Kamchatka on various occasions, especially in 1728; and from this work of Bering's dates our scientific knowledge of the country.

It was in 1728 also that Bering rediscovered the straits between Old World and New which have since borne his name. The discoverer and his contemporaries, despising and ignoring the early Russian pioneers, regarded this as an absolutely fresh discovery; Dejnev was forgotten or unknown. Both at this time and later, especially in his last fatal expedition of 1741, Bering made valuable explorations on both sides of the extreme North Pacific. Alaska had been noticed by the Russians somewhat earlier. Dejnev, for instance, had seen it; and the ‘land opposite’ is noticed in Russian sources in 1711; but Bering and his companion, Chirikov, are the first true explorers (1741). Soon after this a slender Russian colonization, mainly occupied with fisheries and seal-hunting, began on the coasts of what now became for a time American Russia.

At the close of the seventeenth and the beginning of the eighteenth century, the buccaneers were active in some parts of the Pacific; and William Dampier, who was a buccaneer in earlier life, though later a respectable servant of the British Government, advanced British knowledge of some Pacific coasts. Between 1690 and 1705 he revisited considerable parts of the shore-line of Australia and New Guinea, and in 1700 rediscovered New Britain and New Ireland, whose division he missed, giving the name of *Nova Britannia* to both the islands.

The Dutch resumed their Pacific explorations (for a brief period only) with Jacob Roggeveen's circumnavigating voyage of 1721–22. On this expedition Roggeveen crossed the Pacific from east to west, to the south of 'the Line'—a course which makes this voyage unique among all voyages between 1615 and 1764—and discovered Easter Island, Makatea, and a portion of the Samoan group, as well as rediscovering some of the Tuamotu atolls.

(*b*) *The Pacific Discoveries of the later Eighteenth and early Nineteenth Centuries* (1763–87; 1787–1825)

At the close, and partly as a result, of the great colonial struggle between France and Britain, there opens a period of fresh scientific exploration and close survey, with a view to annexation and colonization. By the Peace of Paris (1763) Great Britain absorbed nearly the whole of the French Colonial Empire; and British navigators began to show a more marked activity in the Pacific. In 1764–6 the Hon. John Byron's trans-Pacific voyage led to the discovery of some of the Gilbert Islands, and in 1767 Samuel Wallis visited the Tuamotus, Ladrones, and Tahiti, of which last he was unquestionably the first discoverer, as he also was the first true revealer. Wallis's colleague and companion, William Carteret, discovered Pitcairn Island, and visited Santa Cruz, the Solomons, and New Britain, being the first to sail through the St. George's Channel between New Britain and New Ireland. In 1768, despite French Colonial disasters, the Frenchman Louis Antoine de Bougainville again explored the

Tuamotus, Tahiti, the Samoan group, part of the New Hebrides, the coast of New Guinea, and the Louisiade and New Britain Archipelagos.

Finally, in 1768–79, James Cook completed the main lines of our Pacific knowledge, and laid far and wide new and permanent bases for British expansion in the South Seas. His work forms the transition to the recent age of European acquisition. On his first voyage (1768–71) he passed round South America to Tahiti, and thence sailed west to New Zealand, which had been unvisited by Europeans since Tasman (1643). For nearly a year he explored the North and South Islands, examining their coasts with a thoroughness new in their history, and leaving little, in main lines, to his successors.[1] Then, again sailing westwards, he reached the eastern coast of New Holland. Ignorance of this coast formed the main gap in the Dutch knowledge of the Australian sea-board; practically the whole of it, from Tasmania to Torres Straits, was examined by Cook with the same sedulous and exhaustive attention he had already given to New Zealand. Possession was taken of this region for Britain under the name of New South Wales. By Torres Straits, whose existence he finally cleared of all doubt (thus establishing the fact of the separation of Papua and New Holland), Cook sailed to Batavia, and thence returned to Europe by the Cape route, completing his first circumnavigation.

On his second voyage (1772–75) Cook finally disproved the idea of a vast and valuable Antarctic continent stretching far out into the Southern Ocean from the Pole. He examined the Antarctic regions from every side of the globe, which he thus circumnavigated in high southern latitudes, discovered and named Sandwich Land, or the Southern Thule, and conclusively proved that no land of value existed around the Southern Pole between 50° and 70° S. He again visited New Zealand and the Society Islands, traversed the Pacific along nearly the whole length of the Southern Tropic from Easter Island to the New Hebrides, and discovered and named New Caledonia.

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[1] The discovery of the division by Cook's Straits of the two land-masses was one of his achievements.

On his third and last voyage (1776–79), Cook revisited the Tonga or Friendly Isles, and rediscovered the Hawaiian group. This he named Sandwich Islands (like Sandwich Land in the Far South after Lord Sandwich). Like other men of his time, Cook had probably no knowledge of the earlier claims of Spain in the Hawaiian Archipelago. On this expedition he was especially commissioned to explore as far as possible, on the Pacific side, the still hoped-for North-West Passage from Bering Straits; and he examined these parts of easternmost Asia and North-West America with his usual thoroughness, reaching 70° N. lat. (Icy Cape in Alaska), and satisfying himself that there was no practicable passage. Thence he returned to the Hawaiian Islands, where he was killed (February 1779).

In order of time the French Pacific explorations of La Pérouse and D'Entrecasteaux, like the Russian Pacific expeditions of Kotzebue and others, fall actually within the next period—that of recent European acquisition and exploitation, beginning with the British settlement at Botany Bay in 1787–88; but in spirit they belong to the later eighteenth-century period of transition—the age of Cook—and we may briefly refer to them here.

In 1785–88 Jean François Galoup de la Pérouse, searching primarily (like Cook on his last voyage) for a North-West Passage from the Bering Straits side, made a decided advance in the survey of the coasts of Japan and the adjacent portions of Pacific Asia. He was the first thoroughly to discover Sakhalin Island for non-Russian Christendom; he was also the first properly to explore the straits separating Sakhalin from Yezo (N. Japan), and from Siberia or Manchuria, as well as the passage between Japan and Korea—thus clearing up the last important problems in Pacific coast knowledge, and correcting the chief misconceptions of the early Dutch pioneers. In more southern waters he revisited Easter Island and the Samoan group (where he enlarged previous knowledge of Savaii, Dec. 1787), and touched at the Tongas and at Botany Bay. After this his expedition disappeared (Feb. 1788). It perished by shipwreck on the reef of Vanikoro (Santa Cruz group).

In 1792 the Constituent Assembly of Revolutionary France sent out Antoine Joseph d'Entrecasteaux to search for La Pérouse. Though he did not ascertain the fate of La Pérouse, he added considerably to knowledge, tracing the eastern coast of New Caledonia, discovering many good roadsteads and harbours on the south coast of Tasmania, and touching at more than 300 points on the south and west coasts of Australia proper. D'Entrecasteaux also coasted much of New Guinea and the New Hebrides (near to which he passed the scene of La Pérouse's fate without knowing it) and visited the Tongas and Solomons (1792–93).

The last period of Pacific exploration (overlapping the first stage of present-day colonization and partition) is also marked by the early nineteenth-century voyages of the Russians (or Germans in Russian service), Adam Ivan Krusenstern (1803–6), Otto Kotzebue (1815–18, 1823–26), Fabian Gottlieb Bellingshausen (1819–21), and Fedor Petrovich, Count Lütke (1826–28). With these expeditions, Russia, which had already played so great a part in the opening of the Northern Pacific, entered on the exploration of the south and east of the ocean. Russia, after the accession of Alexander I, was at the height of her power; and these ventures were an outcome of her international position. The chief work of these explorers was done in the Antarctic.

Krusenstern, in execution of his project of promoting maritime communication between Russia and China by the Cape of Good Hope, and by Cape Horn, was the first Russian circumnavigator (1803–6). Kotzebue's voyage for the purpose of exploring a North-East Passage in 1815–18 added a number of minor Pacific discoveries to knowledge, and considerably raised

Russia's position as an exploring nation. The Krusenstern group, the Kutusov and Suvarov Islands in the east of the Marshalls, the Kotzebue Gulf or Sound on the American coast north of Bering Straits (a valuable addition), and New Year Island in the Central Pacific, were discovered on this expedition. Kotzebue's *New Voyage round the World in 1823–6* made many useful corrections in the details of the Pacific map.

Between 1799 and 1815 Russia developed her American Pacific sphere rapidly and effectively. The Emperor Paul sanctioned a Russian-American Fur Company (1799); under Alexander I, various Russian explorers, including Davidov and Krusenstern (1802–4, &c.) conducted scientific missions; Novo-Arkhangelsk was founded at Sitka in 1802; and, a little later, (1807–12) the Russians attempted to establish themselves in California—at the mouth of the Colombia river, the present Pacific frontier of Oregon and Washington States in the U.S.A., and near the site of San Francisco, then of course Spanish, like all this coast up to Cape Mendocino (north of 40° N. Lat.). Thus, nearly forty years before the United States acquired its great western port, and American pioneers founded the present city, Russians had reached this point and were endeavouring, though in vain, to acquire it.

In 1821 Alexander declared all the Pacific coast of America north of 51° N. lat. to be Russian territory. This brought matters to an issue. Britain and the United States protested, to say nothing of Spain; and by the Conventions of April 17, 1824, and February 28, 1825, Russia limited herself, below the Alaskan territory,[1] to a coastal strip only 10 miles wide, not reaching south of 54° 40′ N. lat. (i.e. to the north of Queen Charlotte Island).

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[1] At the same time Alaska, the main block of Russian America, was defined by a boundary line reaching north-east from Mount St. Elias to the Arctic Ocean somewhat west of the Mackenzie estuary.

III. RECENT COLONIZATION AND PARTITION, FROM ABOUT 1787 TO THE PRESENT DAY

§ i. *British Activities*

The age of recent Pacific colonization and partition really opens with the earliest British settlement in Australia. The revolt of the American colonies had deprived Britain of her American bases for convict settlements; and Commodore Philip was commissioned in 1787 to found a penal colony at Botany Bay. Considering Botany Bay unsuitable, Philip moved slightly north to Sydney Harbour, where he founded (under the name of Port Jackson) the city of Sydney, the real 'metropolis' of New South Wales. The colony in Tasmania began in 1803 as an auxiliary penal station; and the other British colonies in Australia grew up soon after. Thus in 1825–27 we have the beginnings of Western Australia; in 1835 of Victoria, with the foundation of Port Philip (now Melbourne); in 1835–37 of South Australia.

From the time of Cook's first visit, in 1770, the mainland of Australia (New Holland) may be regarded as quite clearly within British claims and sphere of influence. New Zealand, rather less definitely, was included from about the same time; but the long delay in planting a proper settlement (1825), still more in proclaiming British sovereignty (1840), and the considerable distance from the Australian mainland, caused hopes of acquisition to be entertained in France. These led to a definite exchange of views between London and Paris, and an assertion of British claims, before which France yielded.

In the islands of the Pacific, east of Australia, the British voyages of the eighteenth century, especially those of Cook, created vague British claims over most of the important groups. The disappearance of France as a Colonial Power in the revolutionary and Napoleonic Wars, and the non-appearance of any fresh rival in the ocean, left Britain a practical monopoly of the Pacific field, as of so many others. But the apparent security of her colonial position, the ease of acquisition whenever and wherever thought suitable, resulted in a much less active policy than might otherwise have developed. As a result, the Hawaiian, Society (Tahiti), Gambier, Samoan, Marquesas, New Caledonian, and other leading groups, have fallen under the influence of other Powers. At the time of the fall of Napoleon, the British Government could probably have proclaimed its sovereignty over all the Pacific.

British missionaries and merchants strengthened for a time the general feeling and appearance of British superintendence created by predominant naval power, by recent leadership in exploration, and by colonial position (especially from the first voyage of Cook). Thus in 1797 the (London) Missionary Society established its earliest important Pacific stations (in Tahiti and Tonga); in 1804 the discovery of sandalwood in the Fiji Islands attracted British traders; and in 1835 British missionaries entered this group. Elsewhere British influence seemed inevitably dominant.

§ ii. *French Activities*

But, before the middle of the nineteenth century, France began to move again in the colonial world. In 1830–40 she began to replace her lost colonies of the seventeenth and eighteenth centuries by the conquest of Algeria. She entered the Pacific as a possessor with the establishment of her protectorate in 1842 over Tahiti and the Society Islands, over the Marquesas, and over a number of smaller groups in the south-east of Oceania (Tuamotu or Low Archipelago and Tubuai or Austral Islands), as well as over the less important Wallis and Futuna Islands near Samoa. The Gambier group was placed under the same protectorate in 1844; and in 1853 France took possession of New Caledonia, her largest, and now her most populous, possession in the Pacific, together with its dependencies of the Loyalty, Chesterfield, and Huon Islands, and the Isle of Pines.

Britain, secure in the possession of Australia, and more lately in that of New Zealand, and in her undisputed control of the sea and the colonial world in general for so many years after the Congress of Vienna, did not in these years take much share in the partition of the Pacific islands.

§ iii. *German Activities*

The formation of the German Empire in 1871, and the uncertainty as to the colonial intentions of its rulers, brought about a change. Vast possibilities in the colonial world were open to the new Germanic power, and Britain made haste to define her claims in various regions where they had been left unfixed. Thus, in October 1874, Britain annexed the Fiji Islands which German Government vessels had begun to visit in 1872. This was her first important political acquisition in the central Pacific. But it was already difficult to take such a step without friction. German private commercial claims confronted British; and Bismarck declared that,

> 'if German subjects should be deprived by the British . . . without judicial sentence of the property acquired before the . . . annexation of Fiji,'

it would shake all confidence in foreign security of justice under British rule. German subjects would feel themselves 'threatened' in their proprietary rights on England

> 'taking possession of independent territories . . . For the Imperial Government it cannot be a matter of indifference if the German trading community be shaken in its confidence, and if it should appeal to the German Empire for the maintenance of its rights.'

German colonial designs were more real than most people in England supposed. Bismarck in earlier days (and even for a decade after the proclamation of the Empire) had officially scoffed at colonization, or at least at colonial dominion, for the German people. When he began to change his view, he showed especial favour to

German propaganda in Samoa; and, if his will had prevailed, Germany's latest colonial possession would have been her earliest.[1] The Hamburg firm of Godeffroy, even before 1870, had acquired considerable tracts of land in this group, much of it fertile plateau country with a climate fairly suitable to Europeans. The years that followed the triumphs of 1870–71 saw many financial crashes in Germany, and her great Pacific firm shared in these troubles. In 1880 the Godeffroys were bankrupt. A South Sea Company tried to raise itself on the ruins of their enterprise; and it was to enable this company to act as the bulwark of German interests in Polynesia that the Chancellor, in his Samoa Subsidy Bill, asked the Reichstag to guarantee its dividends by an annual grant of 300,000 marks (£15,000) for twenty years. But by a majority of sixteen his demand was refused.

When the German colonial movement had really begun to bear fruit—some months after the first practical steps had been taken in Africa, and four years after the Samoa subsidy scheme had failed—Bismarck in 1884 again took up Pacific questions. He now presented to the Reichstag a Bill for subsidizing steamship lines to Australia and the Far East, and proclaimed a modest colonial policy.[2]

But the Steamship Subsidy Bill was only passed by the Reichstag after much delay and in an amended form; and many thought that with this the last had been heard for some time of German action in Pacific waters. But soon the world was startled by the German annexation of New Britain, New Ireland, and the north-east coast of New Guinea (December 1884). British opinion was both alarmed and irritated. Australia was indignant; for the attempt of the Queensland Government to appropriate all the eastern or non-Dutch part of Papua a little earlier (April 1883) had been repudiated by Lord Derby, who, however, assured the House of Lords in the summer of that year (July 2) that any attempt of a foreign Power to settle in New Guinea would be regarded by the British Government as an unfriendly act.

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[1] See also the *German Colonization*, No. 42 of this series.

[2] Bismarck to Count Münster, June 10, 1884, and in the Reichstag Committee, June 23, 1884.

The refusal of Lord Derby to ratify the Queensland annexations in Papua had produced disappointment and anger in Australia. But his assurances to the British Parliament somewhat calmed these feelings; and his suggestions for a policy of common action by the colonists were at once taken up, Australians 'thinking the New Guinea question so pressing as to admit of no delay[1]'. The Sydney Conference followed at the close of 1883, and federation was warmly advocated. In May 1884 the British Colonial Office repeated its soothing assurances in still more positive form—'no foreign Power contemplated any interference in New Guinea'; in August it was announced in the British Parliament that Britain meditated a protectorate over Southern New Guinea, east of the Dutch claims, but not including the islands north and east; and on October 24 a negative reply was given in the House of Commons regarding the reported understanding with Germany.

Already, a fortnight before, British action had at last been taken in regard to South-Eastern New Guinea. All the Australian colonies had joined in offering a subsidy to extend the jurisdiction of the High Commissioner of the Western Pacific over this region; and on October 8 accordingly, Great Britain declared its protectorate over the same from 141° E. long. to East Cape. The original British project of a still wider protectorate—over the whole of Eastern New Guinea, except that portion of the north coast comprised between 141° and 145° E. long.—had been abandoned a month earlier (September 1884).

In 1885 Germany took possession of the Marshall Islands, including the Brown and Providence Atolls, and in the same year of the Solomon Islands. By the important Anglo-German Agreement of 1899, Germany transferred to Great Britain the Northern Solomons with the exception of Bougainville and Buka. After a disputed claim (1885) between Germany and Spain for the possession of the Caroline, Pelew, and Marianne Islands had been settled in favour of Spain (the old possessor), by the arbitration of Pope Leo XIII, the German sphere of influence in the Western Pacific was not again extended until 1899.

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[1] Memorandum from the Premier of Victoria to the Governor of Victoria, December 20, 1884.

The last extension of German Pacific ‘colonization’ was in Samoa. By agreements made in November 1899, Great Britain, in return for concessions in the Northern Solomons, and for German rights in the Tonga Islands, including Vavau and Savage Island, withdrew altogether from Samoan waters; while Germany, more or less realizing at last a very early colonial ambition and Bismarck's first scheme of acquisition beyond the seas, gained the two larger islands (which together form what is usually meant by Samoa), Upolu and Savaii, with Apia, the chief town of the archipelago (in Upolu).

In the same year (1899) Germany gained by purchase the islands which remained in Spanish possession after the war of 1898, viz. the remnant of the Ladrones (including Anson's Tinian or Happy Island), with the Caroline and Pelew groups.

§ iv. *American and Japanese Activities*

The Spanish-American war of 1898 had great results in the Pacific; for the American Pacific Fleet destroyed the Spanish squadron off Manila; the American forces brought about the surrender of that town; and, by the Peace Treaty of December 12, 1898, the whole of the Philippine group, together with Guahán, the largest of the Ladrones or Marianne Islands, were ceded to the United States.

The long outstanding question of the Hawaiian or Sandwich Islands was also settled in 1898, the group being formally annexed to the United States of America in July of that year.[1] Before 1890 a British protectorate had been expected by many ; and for many years after Cook and Vancouver the group was distinctly in the British sphere, if in any European connexion. In 1893, however, the native dynasty was deposed in Hawaii, and a republic was proclaimed in 1894. This Commonwealth prepared the way for definite American rule. Lastly, by the Agreement of December 2, 1899, between Britain, Germany, and the United States, America secured final recognition of the privileges she had acquired in the Samoan group by the Treaties of 1878 (with Samoan chiefs) and of 1889 (with Britain). By these conventions the island of Tutuila (with its excellent harbour of Pago-Pago), and all the Samoan islets east of 171′ W. long., came into the possession of the United States.

The Japanese Revolution of 1868 was a decisive event in the history of the Pacific, for its ulterior consequences have made Japan a Pacific Power of the first rank. In 1895, as the result of the successful war of 1894–95 with China, Japan acquired Formosa and the Pescadores[2] (if these may be reckoned in the Pacific area). In 1905, as the result of the struggle of 1904–5 with Russia, she gained not only immense concessions on the Pacific coast of Asia, but also half of the island of Sakhalin. Finally, as a result of the recent war, Japan has acquired an important part of the former German possessions in the Central Pacific.

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[1] Joint Resolution of both Houses of Congress, July 7, 1898.

[2] By the Treaty of Shimonoseki, April 17, 1895.

APPENDIX

EXTRACTS FROM TREATIES, &c.

I

TREATY BETWEEN CHINA AND JAPAN OF APRIL 17, 1895

Art. I. China recognizes definitely the full and complete independence and autonomy of Corea, and, in consequence, the payment of tribute and the performance of ceremonies and formalities by Corea to China in derogation of such independence and autonomy shall wholly cease for the future.

II. China cedes to Japan in perpetuity and full sovereignty the following territories, together with all fortifications, arsenals, and public property thereon:

(*a*) The southern portion of the Province of Fêng Tien, within the following boundaries:

The line of demarcation begins at the mouth of the River Yalu, and ascends that stream to the mouth of the River An-ping; from thence the line runs to Fêng Huang, from thence to Haicheng; from thence to Ying Kow, forming a line which describes the southern portion of the territory. The places above named are included in the ceded territory. When the line reaches the River Liao at Ying Kow it follows the course of that stream to its mouth, where it terminates. The mid-channel of the River Liao shall be taken as the line of demarcation.

This cession also includes all islands appertaining or belonging to the Province of Fêng Tien situated in the eastern portion of the Bay of Liao Tung, and in the northern part of the Yellow Sea.

(*b*) The Island of Formosa, together with all islands appertaining or belonging to the said Island of Formosa.

(*c*) The Pescadores Group, that is to say, all islands lying between the 119th and 120th degrees of longitude east of Greenwich and the 23rd and 24th degrees of north latitude.

IV. China agrees to pay to Japan as a war indemnity the sum of 200,000,000 Kuping taels. The said sum to be paid in eight instalments. The first instalment of 50,000,000 taels to be paid within six months, and the second instalment of

50,000,000 taels to be paid within twelve months after the exchange of the ratifications of this Act. The remaining sum to be paid in six equal annual instalments as follows: the first of such equal annual instalments to be paid within two years, the second within three years, the third within four years, the fourth within five years, the fifth within six years, and the sixth within seven years after the exchange of the ratifications of this Act. Interest at the rate of 5 per cent. per annum shall begin to run on all unpaid portions of the said indemnity from the date the first instalment falls due.

China shall, however, have the right to pay by anticipation at any time any or all of said instalments. In case the whole amount of the said indemnity is paid within three years after the exchange of the ratifications of the present Act, all interest shall be waived, and the interest for two years and a half, or for any less period if then already paid, shall be included as a part of the principal amount of the indemnity.

V. The inhabitants of the territories ceded to Japan who wish to take up their residence outside the ceded districts shall be at liberty to sell their real property and retire. For this purpose a period of two years from the date of the exchange of the ratifications of the present Act shall be granted. At the expiration of that period those of the inhabitants who shall not have left such territories shall, at the option of Japan, be deemed to be Japanese subjects.

Each of the two Governments shall, immediately upon the exchange of the ratifications of the present Act, send one or more Commissioners to Formosa to effect a final transfer of that province, and within the space of two months after the exchange of the ratifications of this Act such transfer shall be completed.

VI. All treaties between Japan and China having come to an end in consequence of war, China engages, immediately upon the exchange of the ratifications of this Act, to appoint Plenipotentiaries to conclude with the Japanese Plenipotentiaries a Treaty of Commerce and Navigation, and a Convention to regulate frontier intercourse and trade. The Treaties, Conventions, and Regulations now subsisting between China and European Powers shall serve as a basis for the said Treaty and Convention between Japan and China. From the date of the exchange of the ratifications of this Act until the said Treaty and Convention are brought into actual operation the Japanese Government, its officials, commerce, navigation, frontier intercourse and trade, industries, ships, and subjects, shall in every respect be accorded by China most-favoured-nation treatment.

China makes, in addition, the following concessions, to take effect six months after the date of the present Act:

1. The following cities, towns and ports, in addition to those already opened, shall be opened to the trade, residence, industries, and manufactures of Japanese subjects under the same conditions, and with the same privileges and facilities as exist at the present open cities, towns, and ports of China.

(i) Shashih, in the Province of Hupeh.
(ii) Chungking, in the Province of Szechuan.
(iii) Suchow, in the Province of Kiang Su.
(iv) Hangchow, in the Province of Chêkiang.

The Japanese Government shall have the right to station Consuls at any or all of the above-named places.

2. Steam navigation for vessels under the Japanese flag for the conveyance of passengers and cargo shall be extended to the following places:

(1) On the Upper Yang-tsze River, from Ichang to Chungking.
(2) On the Woosung River and the Canal, from Shanghae to Suchow and Hangchow.

The Rules and Regulations which now govern the navigation of the inland waters of China by foreign vessels, shall, so far as applicable, be enforced in respect of the above-named routes, until new Rules and Regulations are conjointly agreed to.

3. Japanese subjects purchasing goods or produce in the interior of China, shall have the right temporarily to rent or hire warehouses for the storage of the articles so purchased or transported, without the payment of any taxes or exactions whatever.

4. Japanese subjects shall be free to engage in all kinds of manufacturing industries in all the open cities, towns, and ports of China, and shall be at liberty to import into China all kinds of machinery, paying only the stipulated import duties thereon.

All articles manufactured by Japanese subjects in China, shall in respect of inland transit and internal taxes, duties, charges, and exactions of all kinds, and also in respect of warehousing and storage facilities in the interior of China, stand upon the same footing and enjoy the same privileges and exemptions as merchandise imported by Japanese subjects into China.

In the event additional Rules and Regulations are necessary in connexion with these concessions, they shall be embodied in the Treaty of Commerce and Navigation provided for by this Article.

VII. Subject to the provisions of the next Article, the evacuation of China by the armies of Japan shall be completely effected within three months after the exchange of the ratifications of the present Act.

VIII. As a guarantee of the faithful performance of the stipulations of this Act, China consents to the temporary occupation by the military forces of Japan, of Wei-hai Wei, in the Province of Shantung.

Upon the payment of the first two instalments of the war indemnity herein stipulated for, and the exchange of the ratifications of the Treaty of Commerce and Navigation, the said place shall be evacuated by the Japanese forces : provided the Chinese Government consents to pledge, under suitable and sufficient arrangements, the customs revenue of China as security for the payment of the principal and interest of the remaining instalments of the said indemnity. In the event no such arrangements are concluded, such evacuation shall only take place upon the payment of the final instalment of said indemnity.

It is, however, expressly understood that no such evacuation shall take place until after the exchange of the ratifications of the Treaty of Commerce and Navigation.

IX. Immediately upon the exchange of the ratifications of this Act all prisoners of war then held shall be restored, and China undertakes not to ill-treat or punish prisoners of war so restored to her by Japan. China also engages to at once release all Japanese subjects accused of being military spies or charged with any other military offences. China further engages not to punish in any manner, nor allow to be punished, those Chinese subjects who have in any manner been compromised in their relations with the Japanese army during the war.

X. All offensive military operations shall cease upon the exchange of the ratifications of this Act.

II

JOINT RESOLUTION OF THE UNITED STATES CONGRESS, JULY 7, 1898

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled :

That said Cession is accepted, ratified, and confirmed, and that the said Hawaiian Islands and their dependencies be, and they are hereby, annexed as a part of the territory of the United States, and are subject to the sovereign dominion thereof, and that all and singular the property and rights hereinbefore mentioned are vested in the United States of America.

The existing laws of the United States relative to public lands shall not apply to such lands in the Hawaiian Islands; but the Congress of the United States shall enact special laws for their management and disposition: Provided that all revenue from or proceeds of the same, except as regards such part thereof as may be used or occupied for the civil, military, or naval purposes of the United States, or may be assigned for the use of the Local Government, shall be used solely for the benefit of the inhabitants of the Hawaiian Islands for educational and other public purposes.

Until Congress shall provide for the government of such islands all the civil, judicial, and military powers exercised by the officers of the existing Government in said islands shall be vested in such person or persons, and shall be exercised in such manner as the President of the United States shall direct; and the President shall have power to remove said officers and fill the vacancies so occasioned.

The existing Treaties of the Hawaiian Islands with foreign nations shall forthwith cease and determine, being replaced by such Treaties as may exist, or may be hereafter concluded, between the United States and such foreign nations. The municipal legislation of the Hawaiian Islands, not enacted for the fulfilment of the Treaties so extinguished, and not inconsistent with this Joint Resolution, nor contrary to the Constitution of the United States nor to any existing Treaty of the United States, shall remain in force until the Congress of the United States shall otherwise determine.

Until legislation shall be enacted extending the United States' customs laws and regulations to the Hawaiian Islands, the existing customs relations of the Hawaiian Islands with the United States and other countries shall remain unchanged.

The Public Debt of the Republic of Hawaii lawfully existing at the date of the passage of this Joint Resolution, including the amounts due to depositors in the Hawaiian Postal Savings Bank, is hereby assumed by the Government of the United States; but the liability of the United States in this regard shall in no case exceed 4,000,000 dollars. So long, however, as the existing Government and the present commercial relations of the Hawaiian Islands are continued as hereinbefore provided, said Government shall continue to pay the interest on said debt.

There shall be no further immigration of Chinese into the Hawaiian Islands, except upon such conditions as are now or may hereafter be allowed by the laws of the United States;

and no Chinese, by reason of anything herein contained, shall be allowed to enter the United States from the Hawaiian Islands.

The President shall appoint five Commissioners, at least two of whom shall be residents of the Hawaiian Islands, who shall, as soon as reasonably practicable, recommend to Congress such legislation concerning the Hawaiian Islands as they shall deem necessary or proper.

Sec. 2. That the Commissioners hereinbefore provided for shall be appointed by the President, by and with the advice and consent of the Senate.

Sec. 3. That the sum of 100,000 dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the Treasury, not otherwise appropriated, and to be immediately available, to be expended at the discretion of the President of the United States of America, for the purpose of carrying this Joint Resolution into effect.

Approved, July 7, 1898.

III

CONVENTION BETWEEN GREAT BRITAIN, GERMANY, AND THE UNITED STATES, DECEMBER 2, 1899

Art. I. The General Act concluded and signed by the aforesaid Powers at Berlin on the 14th day of June, A.D. 1889, and all previous Treaties, Conventions, and Agreements relating to Samoa, are annulled.

II. Great Britain renounces in favour of the United States of America all her rights and claims over and in respect to the Island of Tutuila and all other islands of the Samoan group east of longitude 171° west of Greenwich.

Germany in like manner renounces in favour of the United States of America all her rights and claims over and in respect to the Island of Tutuila and all other islands of the Samoan group east of longitude 171° west of Greenwich.

Reciprocally, the United States of America renounce in favour of Germany all their rights and claims over and in respect to the Islands of Upolu and Savaii, and all other islands of the Samoan group west of longitude 171° west of Greenwich.

III. It is understood and agreed that each of the three Signatory Powers shall continue to enjoy, in respect to their commerce and commercial vessels, in all the islands of the Samoan group, privileges and conditions equal to those enjoyed by the Sovereign Power in all ports which may be open to the commerce of either of them.

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MAPS

Messrs. Stanford have published a map of the Pacific Islands in the London Atlas series. British possessions, as before the War, are marked in red.

The Admiralty War Staff Intelligence Division have issued, in connexion with this series, a map showing the 'Distribution of the French and German islands in the Pacific'. (Scale and date not given.)

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Extent

The Galápagos Islands or Colón Archipelago, belonging to the Republic of Ecuador, are a group of fifteen large and about forty smaller islands lying in the Pacific Ocean, 580 miles west of the coast of South America. The limits of the group are 0° 38′ north to 1° 27′ south latitude and 89° 16′ 30″ to 91° 40′ 45″ west longitude, with the exception of the two isolated islets of Wenman and Culpepper, which lie north-north-east of Albemarle Island, 77 and 97 miles distant respectively. The total land area is about 2,870 square miles. The largest islands are Albemarle or Isabela, 100 miles in length and 28 miles in extreme breadth, with an area of 1,650 square miles; Narborough or Fernandina, 250 square miles; Indefatigable or Santa Cruz, 390 square miles; James or San Salvador, 220 square miles; Chatham or San Cristóbal, 174 square miles; and Charles (King Charles) or Santa María (also called Floreana).

The group was known as the Galápagos (Spanish, *galápago*=tortoise) before the time of the buccaneers, and, despite a decree of the Ecuadorean Government in 1892 renaming it the Colón Archipelago, so remains. The alternative Spanish names of the islands were given at various times. (See Appendix II, p. 25.)

(2) Surface, Coasts, and Water-Supply

Surface

The islands consist of little more than a series of volcanic peaks, some isolated, such as the islands of Abingdon or Pinta, Bindloe or Marchena, and Hood or Española, and others joined together by lava-flows to form larger islands. On Albemarle and Chatham islands there are several volcanic peaks on a continuous ridge, and the lava-flows have spread wide enough to form a good deal of low-lying land. On the other hand, two of the larger islands, namely Indefatigable and Narborough, consist each of a single volcanic peak. Altogether there are about 2,000 craters in the group, but only a few of these are prominent. The highest elevations are on Albemarle Island, 4,700 ft.; Narborough Island, 3,720 ft.; Chatham Island, 2,490 ft.; Indefatigable Island, 2,296 ft.; and Charles Island, 1,780 ft. Albemarle and James Islands alone have active volcanoes at present.

There is little low-lying land, but the slopes on the larger islands are gentle until the interior is reached.

Coasts

The coasts are, for the most part, steep and rocky and fringed with sunken rocks, and off many points there are reefs. The channels between the islands, though not adequately surveyed, seem to be deep and free from dangers. Tagus Cove in Albemarle Island is the only landlocked harbour; its shores are steep and inaccessible. The other anchorages are open bays, but, owing to the continuous fine weather, are safer than they appear on the chart. Most of them have, however, a northerly exposure, and so are open to the heavy rollers that come from the north during the rainy season. The chief anchorages[1] are Wreck Bay on Chatham Island, Post Office Bay on Charles Island, and Conway Bay on Indefatigable Island, but there are many others, and, in the absence of swell, landing is possible in most places.

Water-Supply

The water-supply is poor and uncertain. Springs and streams are scarce; some islands have none, and on others they occur only during the wet season. The few springs that occur near sea-level are all brackish.

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[1] See also *infra*, pp. 19-20.

Chatham Island is best supplied with water, and has a stream emptying by a waterfall into Freshwater Bay. There are also perennial springs on Charles Island, James Island, Indefatigable Island, and Albemarle Island.

(3) CLIMATE

The climate is, on the whole, warm and dry, but not excessively hot for a place situated on the Equator. The mean monthly temperature varies from 70° F. (21° C.) to 81° F. (27° C.). February and March are the warmest months, but even then the noon temperature at sea-level is seldom over 85° F. (29·5° C.). July to September is the cool season. The moderate temperatures of the islands are largely due to the cold Humboldt current which washes their shores.

The south-east trade wind blows regularly from May to December or January, but in other months is uncertain, and calms often occur with light day breezes.

The lower parts of the islands are very dry, and get showers only during the period from January to June, or in some years from January to March. This is called the spring season. It is irregular in its occurrence on different islands, and may even miss a year altogether. At higher altitudes the rainy season is from July to November, and the dry season from December to June. In some years there is a deficiency of rain.

(4) SANITARY CONDITIONS

The islands seem to be healthy, but in view of the scanty population no reliable information is available. If life at lower altitudes proved to be trying and enervating, the interior altitudes would probably provide ideal hill stations, the mean temperatures being some 10° F. (5·5 C.) lower than on the sea-coast.

(5) POPULATION

The islands were uninhabited until the arrival of small numbers of settlers in 1831, followed by the foundation of a small Ecuadorean colony in 1832, and of an Ecuadorean penal settlement (which is said to exist no longer) in the following year. By the middle of last century the colony of 250 free settlers had virtually disappeared, largely owing to murders by the convicts. For many years the only inhabitants were occasional hunters of wild cattle, but recently colonization has begun again, and is now increasing in importance. In 1913 Chatham Island had a population of 675 Ecuadoreans, chiefly engaged in sugar-growing at the settlement of Progreso. Albemarle Island had 115 inhabitants at the settlement of Port Villamil in 1903. Later figures are not obtainable. Charles Island occasionally has a few cattle-hunters. The other islands are uninhabited.

The only two settlements are Progreso on Chatham Island, three miles from Wreck Bay, and Port Villamil on the south of Albemarle Island. Both settlements consist merely of a few huts. There is no garrison.

II. POLITICAL HISTORY

CHRONOLOGICAL SUMMARY

1535 The islands discovered by Tomás de Berlanga.
1546 Rediscovery by Rivadeneira. Charter for colonization applied for, but not granted.
1570 Galápagos Islands inserted in atlas of Ortelius.
1684-85 First survey made by Ambrose Cowley.
1709-20 Privateers refresh at the islands.
1793-94 Explored by Captain Colnett and partially surveyed.
1797-1800 Whalers begin to resort to the islands.
1813 Campaign of Capt. Porter (U.S. Navy) against English whalers.
1816 Privateers use the islands in the war between Spain and her colonies.
1822 Captain Hall, of H.M.S. *Conway*, conducts pendulum experiments at Abingdon Island. French explorers.
c. 1825 Discovery of *orchilla* lichen in Charles Island.
1831 Settlers on Charles Island from Guayaquil.
1832 The archipelago formally annexed by the new Republic of Ecuador. More settlers introduced by Villamil. Cattle and farming developed.
1835 H.M.S. *Beagle* visits and surveys the archipelago.
1841 Revolt against officer in charge at Floreana.
1854-83 Suggested occupation of one or more islands by the maritime nations.
1871 Valdizán obtains sole right of collecting *orchilla*.
1875 Captain Cookson's report to the Admiralty. Cobos and Monroy develop sugar-growing and cattle-raising in Chatham Island.
1891 Agassiz makes researches in the islands.
1891-98 United States of America considers possibility of a coaling-station in the archipelago, and protests against its being given to another Power or neutralised.
1906 Alfaro Revolution in Ecuador. Protests against Garcia's suggestion of alienating any part of the national territory.

(1) *Early History*

The existence of these islands was first made known by Tomás de Berlanga, third Bishop of Castilla del Oro, in New Spain, who found them accidentally in March 1535, while voyaging from Panama to Peru. By right of prior discovery, and in accordance with the Papal Bull of 1493 as modified by the Treaty of Tordesillas (1494), they fell within the dominions of the Emperor Charles V in his character of King of Spain. This claim, though not specifically asserted, was not challenged till 1832, when the Republic of Ecuador took formal possession of the archipelago.

When discovered, the islands were without human inhabitants. In a letter[1] written by the Bishop to the Emperor, he described the parched and rock-strewn volcanic soil, the huge tortoises, iguanas, seals, and sea-turtles, the fearless birds, a saline spring, cacti, and other peculiarities, which, even apart from the evidence of the latitude observed by him, identify them as the Galápagos or Tortoise Islands.

In 1540 two ships were despatched from Guatemala to examine the islands, which had again been sighted and reported by a passing vessel; but bad weather prevented the explorers from landing. The second definite discovery was made in 1546, when Diego de Rivadeneira, fleeing northwards from Quilca in a small ship, to escape from Gonzalo Pizarro's insurgent forces, fell in with a group of thirteen islands unknown to his pilot, which, from their geographical position and from the description of the soil and fauna, were clearly identical with those discovered eleven years before. This occurrence was forthwith reported to the Spanish authorities in Guatemala, and by them to the Viceroy of New Spain.[2]

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[1] Printed in the *Coleccion de documentos ineditos relativos a . . . . America y Oceania.* See Pacheco, tomo XLI, 1884, pp. 538-544. See also the *Boletin de la Sociedad Geográfica de Madrid*, XXXI, 1891, pp. 352-55.

[2] *Boletin de la Sociedad Geográfica de Madrid*, XXXI, pp. 356-362.

Francisco de Castellanos, Treasurer of Guatemala, appealed to Prince Philip (afterwards Philip II) for permission to explore and settle the islands,[3] but no powers seem to have been granted, and in 1585 the islands were again accidentally met with by one Alonso Niño.[4] They had, however, already found a place on some maps, of which the earliest appears to have been that of Ortelius (1570). They are mentioned in the "Observations" of Sir Richard Hawkins (son of Sir John), as known in 1593, though he does not seem to have visited them.[5] They were regarded as barren, and also had the reputation of being enchanted.[6] There is mention of some Spanish castaways being rescued by a Spanish vessel in 1605,[7] from "an island" called *de los Galápagos.*

(2) *Buccaneering Period*

In 1684 various parties of buccaneers and filibusters, mostly under British commanders, made use of the islands. William Dampier was one of these.[8] In 1684 and 1685 the ship *Batchelor's Delight,* commanded by John Cook, visited the islands; and Ambrose Cowley, who was her sailing master, made the first general survey of the islands. Cowley's charts[9] and journal,[10] the latter of which has been twice printed,[11] are preserved in the British Museum. On her second visit, the *Batchelor's Delight* spent three months at the islands, and some of the particulars of this visit were recorded by her surgeon, Lionel Wafer.[12]

[3] *Boletin, loc. cit.*, p. 364.

[4] Cabello de Balboa, M. *Miscellanea Austral.* MS.

[5] Hawkins, Sir R., *Observations of Sir Richard Hawkins, Knight, in his Voiage into the South Sea*, p. 179.

[6] Cowley, W. A. *A Journal of the Voyage of W. A. Cowley*, MS., fol. 12.

[7] Pinelo, *La Vida de Santo Toribio*, p. 417.

[8] See Knapton, *A Collection of Voyages*, vol. I.

[9] Sloane MSS., 45.

[10] *Ibid.*, 54.

[11] In Knapton's and Hacke's *Collections*.

[12] See Knapton, *A Collection of Voyages*, vol. III.

Abundance of tortoise and iguana meat, fish also, and some fresh water were found; and one of the islands formed a convenient base for careening the ships, storing flour and other necessaries, treating the sick and wounded, and concerting future plans without being spied upon by the Spaniards. A good many Portuguese, Flemish, and French adventurers took part in these and similar proceedings.

On the other hand, Captain Woodes Rogers, a privateer, complained, in 1709, of a lack of wood and water.[13] Nevertheless, he returned to the islands a second time. Other Englishmen (Clipperton[14] and Shelvocke[15]) were there in and about 1720. The islands were also occasionally visited by Spaniards, who gave them Spanish names and made rough charts. There is still some confusion amongst the names given at various times by Englishmen and Spaniards; and more recently by the Ecuadoreans, at the celebration of the four hundredth anniversary of the discovery of America by Columbus. (See Appendix II, p. 25.)

(3) *Whaling Period*

After the buccaneers and their occupation had disappeared, the Galápagos Islands lapsed into oblivion for several decades, and only began to serve the purposes of man again when the South Sea whaling enterprise came into vogue. In 1793-94 they were twice visited and examined by Captain Colnett in the *Rattler*, despatched by a leading firm of whale-ship owners to extend the knowledge necessary for whaling in the South Seas. Colnett made a rough survey of the islands, and described their rocky shores, abundance of seals, convenient anchorages, and vicinity to favourite resorts of the right kind of whales.[16] Another partial and inaccurate survey of the islands was made in 1793 by Lorenzo Vacaro, "master" of the Spanish frigate *Santa Gertrudiz.*[17] Vancouver, in H.M.S. *Discovery*, sighted some of the islands in 1795, but did not come to anchor.

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[13] Rogers, Woodes, *A Cruising Voyage*, &c., pp. 205-211, 261-265.

[14] Betagh, W., *A Voyage Round the World*, &c., p. 144.

[15] **Shelvocke, G., *A Voyage Round the World*, &c., *passim*.**

In 1797, 1800, 1813, 1819, and 1825 there were violent volcanic outbreaks, which did not, however, prevent British and North American ships from frequenting the islands to obtain wood and water. The eruption of 1800 was witnessed by Amasa Delano, an American shipmaster,[18] that of 1819 by Captain Fanning,[19] and that of 1825 by B. Morrell, junior.[20] To this time belongs the story of the wild Irishman, Patrick Watkins, who for five years lived alone on Charles Island (Floreana), made money out of the visiting whalers, and escaped with it to Guayaquil.[21]

In 1813, during the war between England and the United States, Captain Porter, of the United States frigate *Essex*, made the islands an American base, and compelled twelve English whale-ships to surrender. Porter witnessed and described an eruption of the volcanoes in Albemarle and Charles Islands.[22]

During the war between Spain and her colonies the islands were used by privateers that preyed on Spanish commerce. When, however, the independence of the colonies was established, a change was not immediately made in the political status of the Galápagos, and they continued for a time to be *terra nullius*.

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[16] Colnett, J., *A Voyage to the South Atlantic*, &c., pp. 47-61, 137-161.

[17] Jiménez de la Espada, in the *Boletin de la Sociedad Geográfica de Madrid*, XXXI, pp. 398-402, and Fuentes, M. A., *Memorias de los Virreyes*, vol. VI.

[18] Delano, A., *Narrative*.

[19] Fanning, E., *Voyages*, pp. 407-410.

[20] Morrell, B., *A Narrative of Four Voyages to the South Sea* . . . . &c.

[21] Du Petit-Thouars, A., *Voyage autour du Monde sur la frégate* La Vénus . . . . &c. *Relation*, vol. II, pp. 279-323; Dominy de Rienzi, *Océanie*, vol. III; and Coulter, J., *Adventures in the Pacific*.

[22] Porter, David, *Journal of a Cruise made to the Pacific Ocean* . . . . &c., vol. II.

(4) *Annexation by Ecuador*

During the next few years several distinguished persons visited the islands. These visitors included Captain Basil Hall, of H.M.S. *Conway*, who conducted pendulum experiments at Abingdon Island (1822); Captain Lord Byron, of H.M.S. *Blonde* (1825); and Captain Duperrey, of the French frigate *Coquille*. But the epoch-making event in the history of the archipelago was the discovery, probably by a Spaniard, of *orchilla* or dyers' moss (*Roccella tinctoria*) on some of the islands, especially Charles Island. On this circumstance becoming known the Republic of Ecuador decided to annex the group. A politico-commercial syndicate was formed, with a certain Don José Villamil for its president, and to this syndicate a concession or charter was granted. Villamil was a native of Louisiana, who had migrated to South America, and greatly distinguished himself in the war between Ecuador and Peru, from which he emerged with the rank of General. He had been chiefly instrumental in bringing the islands and the *orchilla* enterprise to the notice of the Ministry, and, in return, was appointed Governor of the new colony, with ample powers for administering its internal affairs. A preliminary exploring party was despatched from Guayaquil in October 1831, and small batches of settlers followed. On February 12, 1832, Colonel Ignacio Hernández, representing the Government of Ecuador, took formal possession of the Galápagos Group; and at Charles Island, thenceforward called Floreana, after President Flores, the administration was handed over to Villamil and another representative, Señor Lorenzo Bark.[23]

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[23] Villavicencio, M., *Geografia de la Republica del Ecuador*, pp. 475-481; and Vidal Gormaz, in the *Boletin de la Sociedad Geográfica de Madrid*, XXXI, p. 156.

(5) *Development of Resources*

General Villamil, having persuaded a few younger men of good family in Guayaquil to join him, set vigorously to work to develop the resources of the islands. He imported cattle, horses, swine, asses, goats, cats, and fowls, some of which were distributed from Floreana to other islands. Household vegetables were cultivated, and small plantations of sugar-cane, coffee, and various sub-tropical fruits established. The products were sold in considerable quantities to the whaling captains; and it was probably at their instance that the settlers took to killing off the tortoises ruthlessly for the sake of their oil. In the course of a few years, the giant tortoise became extinct at Floreana and on some of the other islands.

Unfortunately the Governor did not reside at Floreana continuously; and the settlers, a heterogeneous medley of characters largely recruited from unsuitable classes and occupations, proved wanting in perseverance and industry. Meantime, the Ecuadorean Government found it convenient to rid themselves of political opponents and military delinquents by relegating them to Floreana, under a pretext of furnishing the original settlers with the needed labourers; and it was not long before these malcontents were supplemented by a number of common criminals, so that the island became by degrees a loosely administered convict settlement.

In 1835 H.M.S *Beagle*, commanded by Captain Robert FitzRoy, with Charles Darwin on board as surgeon-naturalist, paid a prolonged visit to the islands. The journals of both these officers are full of interesting matter bearing on the physical features of the islands, and their natural products; but contain little history. There were about 200 persons domiciled at Charles Island when the *Beagle* was there, and a few others were met with collecting tortoise oil at James Island. One Englishman and one Ecuadorean were then at Chatham Island supplying fresh provisions to whalers.[24] In 1838 Captain Aubert Du Petit-Thouars, of the French frigate *La Vénus*, visited several of the islands, and wrote a good account of them.[25]

(6) *Domestic Troubles and Decay*

By that time Villamil's "colonists," including convicts, had been scattered over several islands, and in 1837 the General resigned his Governorship. He was succeeded by a Colonel José Williams, whose violent character provoked a revolt (1841), ending in his flight. In 1842 Villamil returned to adjust matters, but found few occupants and no established authority. In 1845, there were still about forty persons in the islands, living a life of independence, but of penury and squalor; and by 1849 no more than twenty-five remained. In 1852 a band of convicts, led by a man named Briones, on hearing that the Flores Government had been overthrown by a revolution, murdered General Mena (who represented Villamil at Chatham Island) and piratically seized a whale-ship, in which they proceeded to Guayaquil, only, however, to be arrested, tried, condemned to death, and shot by the rebel Government there.

Depravity and insubordination seem to have prevailed for some time after these events, and the population became gradually dispersed. In 1853 some few survivors of the convict settlers still remained; but they were so completely left to their own resources that, by 1868, they had dwindled to less than a dozen individuals living in a state of semi-savagery.

In 1875 the number of whale-ships visiting the group did not exceed fifteen in a year, whereas, in the early part of the century, as many as fifty used to resort to it annually. The whaling industry in those seas has since almost died out; and the profit that used to be made out of it by settlers in the Galápagos Islands has correspondingly fallen away.

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[24] FitzRoy, R., *Narrative of the Surveying Voyages of* H.M.S. Adventure *and* Beagle . . . . &c., vol. II, pp. 485-505; and Darwin, C., *Journal of Researches* . . . . &c., vol. III, pp. 453-478.

[25] Aubert Du Petit-Thouars, A., *Voyage autour du monde sur la frégate* La Vénus . . . . &c. *Relation*, vol. II, pp. 279-323.

(7) *Partial Revival*

The cattle, originally imported by Villamil in 1832, were supplemented and partly redistributed by him in 1845; they multiplied greatly, so that their number at Floreana alone, in 1858, was estimated at 4,000, all more or less wild. There were many others at Chatham and Albemarle Islands; and asses, goats, and pigs on some of the rest, notably a fine breed of half-wild asses at Indefatigable, and of wild pigs at James Island.

Ships of war of various nations continued to call at intervals; and scientific parties busied themselves in collecting information and specimens in the group. The reports of their proceedings afford some information about the social, political, and commercial conditions they found there. Among such visitors were H.M.S. *Herald* and *Pandora* in 1846,[26] the *Eugénie*[27] (Swedish) in 1852, H.M.S. *Zealous* in 1870, and *Chameleon* a year later. Professor Louis Agassiz was there in the U.S. ship *Hassler* on a scientific mission in 1872; Commander Cookson, of H.M.S. *Petrel*, submitted a full and instructive report to the Admiralty in 1875; and Dr. Theodor Wolf, who visited four of the islands in that year, did the same for the Government of Ecuador.[28] Dr. Habel, a naturalist, collected birds in the archipelago in 1868; and finally, Professor Alexander Agassiz examined it during his visit in the U.S. steam-vessel *Albatross* in 1891.[29]

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[26] Seemann, B., *Narrative of the Voyage of* H.M.S. Herald . . . . &c., chap. IV, 1853.

[27] Salvin, O., ***On the Avifauna of the Galápagos Islands***, in *Transactions of the Zoological Society*, vol. IX, 1877, p. 426.

[28] Wolf, Dr. T., *Apuntes sobre el Clima de las islas Galápagos* . . . . &c., *passim*, 1879.

A company was formed in 1858 called the "Orchillera Company," to work the *orchilla*. Among its most active promoters were Sres. José Monroy and Manuel J. Cobos, who reserved to themselves the right to colonize Chatham Island. *Orchilla* was still fitfully exported in 1868, as well as small quantities of salted fish, some tortoise oil, and a few hides. But the company was dissolved in 1870, and its concession as regards *orchilla* was taken up by Sr. José de Valdizan, who then removed to Floreana and established a homestead and a food plantation for the requirements of his collectors. By 1878[30] Valdizan's enterprise was in a fair way to flourish; but in July of that year the proprietor was murdered by one of his labourers, and Floreana was again abandoned.

In 1893 Sr. Antonio Gil went to Floreana and planted a new settlement there—the third since Vallamil's attempt—but it only survived until 1897, when the founder decided to abandon it in favour of Albemarle Island, now called Isabela. There he created a village, called Santo Tomás; and a population of some 200 persons, living in 60 or 70 huts, gathered round him to work the deposits of sulphur in the island. They are reported to have prospered fairly well, down to 1907 or 1908 at least; and the wild cattle at Isabela are understood to be still Sr. Gil's property. The sulphur was shipped to Guayaquil from a cove named Puerto Chico, situated opposite Brattle Island.[31]

Sres. Cobos and Monroy, in the meanwhile, laid the foundation of their settlement at Chatham Island with a roll of thirty-seven persons. Sugar-cane, maize, root crops, and tropical fruits were planted, and *corrals* established for dealing with the cattle. By 1879 Cobos had decided to settle permanently, and in 1881 considerable plantings of cane were undertaken. Five years later a factory with steam power was erected. Coffee plants were subsequently introduced, and by 1889 the community numbered 287 persons. The officer charged with the civil administration of the islands was then Don Pedro Jaramillo, who was assisted by a secretary, an inspector of police, a schoolmaster, and a lightkeeper.

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[29] Agassiz, A., in the *Boletin de la Sociedad Geográfica de Madrid*, vol. XXIII, 1892.

[30] One account says 1875.

[31] *El Ecuador: Guia comercial, agricola e industrial*, &c., Guayaquil, 1909.

Their authority was supported by a military commandant, four non-commissioned officers and fifty men of the National Guard[32]; but Sr. Cobos, being the employer of all the rest of the population, was popularly regarded as "King" of the Galápagos. By 1893 his establishment had increased to 334, and the settlement was deserving of its name, "Progreso." Water had been laid on at considerable cost, and a Decauville railway had been constructed. But on January 15, 1904, a revolt took place among the workers; Cobos himself and the Government Commissioner, Sr. Leonardo Reina, were assassinated; and the insurgents, to the number of 78, fled from the island in a vessel they seized, and reached the Colombian coast. The next Commissioner appointed was Sr. Juan Piño, who found 245 inhabitants when he took over the administration.[33] Their number has fluctuated between that and a little over 300 down to the time when the European War began.

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[32] *Diario oficial*, Quito, October 21, 1889, No. 151.

[33] Monograph at end of *El Ecuador: Guia comercial, agricola e industrial*, 1909.

III. SOCIAL AND POLITICAL CONDITIONS

(1) *Religious*

Bishop Tomás de Berlanga has recorded that, when he accidentally discovered some of the Galápagos Islands in 1535, he used the occasion to celebrate Mass on shore there.[34] From that date the history of religious worship in the Archipelago is a complete blank until March 1832, when Dr. Eugenio Ortiz, who was the chaplain accompanying the annexation party from Guayaquil, celebrated Mass "for the second time in 300 years," it is said, at a spot in the isle of Floreana they named *El Asilo de la Paz*.[35]

Since that time Floreana has been thrice colonized and thrice deserted; and it does not appear that the population settled there or at Chatham Island has ever provided itself with a church or a chaplain. At the smaller settlement, called Santo Tomás, in Isabela (Albemarle) Island, a church was built[36]; but no particulars are available.

Roman Catholicism is nominally professed by the mass of settlers; but Ecuadorean law permits the practice of any form of worship not contrary to its institutions or moral principles, though several restrictions are, or were, in effect imposed. The islands, as a group, are included in the diocese of Guayaquil.

(2) *Political*

The government of the island colony since 1885 has consisted of an administrator, who was expected to apply the common laws of Ecuador; the islands having been constituted, in 1832, a dependency (subsequently proclaimed a territorial part and parcel) of the province named Guayas, of which Guayaquil is the capital. In 1889 the administrator's authority was supported by five officers and fifty men of the National Guard, and an Inspector of Police.[37]

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[34] Pacheco, J., *Coleccion de documentos ineditos* . . . . &c., XLI, Madrid, 1884.

[35] *El Ecuador: Guia comercial, agricola e industrial,* 1909.

[36] *Ibid.*

In 1885 the National Congress passed an Act to exempt the colonists from taxation of all kinds, relieved them entirely from military service, fixed the area to be granted to settlers for cultivation free of rent, and created the post of "Jefe Territorial" or Resident Commissioner. A residence for this officer, with the nucleus of an administrative building, was erected at Chatham Island in the following year; and a leading light for shipping was installed at Puerto Chico.[38] By 1913 these buildings were in a state of decay beyond the possibility of repair. There were no quarters for the police, who consisted of twelve constables and an inspector, so that they had to be billeted in various private lodgings, to the detriment of their efficiency and independence. No police cells were provided by the Government; but two had been constructed of galvanised iron sheets, lent by the sugar factory for the purpose. The light-keeper's quarters were also in a ruinous condition; and the Commissioner's report for that year is devoted to lamentations that nothing was done for the colony by the Government of the Republic, and no regular or expeditious communications had been established, either with the mainland or with the other islands.

A sum of $24,000, nevertheless, stood on the Estimates of 1912 for expenditure on Public Work in the group, officially named since 1892 "El Archipielago de Colón." The report (No. 24), which reads like an appeal *ad misericordiam*, is signed by Sr. Caesar Aray Santos as Commissioner, and addressed to the Provincial Governor of Guayas.

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[37] *Diario oficial*, Quito, October 21, 1889, No. 151.

[38] *El Ecuador: Guia comercial, agricola e industrial*, 1909.

(3) *Educational*

Particulars of education in the Galápagos Islands are exceedingly few, because little or nothing has been done by the Republic or the Province to promote or assist such trifling efforts as have been made by the settlers and the factory at Progreso. The list of officers on the establishment of the islands in 1889 included a schoolmaster; but the list of buildings contains no mention of a school. In the latest available Report of the Commissioner,[39] printed as an Appendix to the Minister of Public Education's Annual Return for 1913, it is stated that a notable advance had been made, inasmuch as there then existed a mixed school, conducted at the Government's expense, at which 24 children, more or less, counting both sexes, attended daily "with real satisfaction to their parents." The school was situated, however, on land belonging to the factory at Progreso, and was hygienically defective. It also lacked a proper outfit. No other particulars of the school are supplied.

The Report (which in other respects is by no means an optimistic one) states, however, that the vicious element formerly so notorious among the settlers had almost disappeared; that in 1913 the existing population was a peaceful and industrious community, engaged in cultivating the soil; and that their social and material improvement now seemed assured. No figures or statistics are quoted in the Report.

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[39] *Informe Anual del Ministro de Instruccion Publica*, Quito, 1913.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) *Tracks*

THERE are no roads, properly speaking, in the islands, but there is a track in Chatham Island from Wreck Bay to Progreso—a distance of 3 miles. Tracks have also been made in Charles Island.

(2) *Railways*

There is a light railway, 7 kilometres in length, from Progreso to the quarries, used for bringing sugar-cane to the mills at Progreso.

(3) *Ports*

There are no harbours, but there are various open bays where, owing to the continuous fine weather, anchorage is usually safe. Several of these might be transformed into good harbours by the construction of moles, but labour and most of the material necessary would have to be imported.

Chatham Island offers several good anchorages, of which *Wreck Bay* is the most important, because it is the port of the sugar factory at Progreso. The bay is about three-quarters of a mile wide at the entrance and extends for about half a mile; there is secure anchorage in 6 fathoms. A pier 150 yds. long extends in a north-westerly direction, and there is a storehouse at the head of the cove, where the track to Progreso begins. Fresh water has been brought in pipes to the end of the pier from a lake in the high part of the island. *Stephens Bay*, locally known as *Porto Grande*, is a larger anchorage with an excellent landing place. There are other anchorages at *Terrapin Road* and at *Freshwater Bay*; at the latter place there is a good supply of fresh water, but the watering place cannot always be approached on account of the surf. This bay and Wreck Bay are the only watering places for shipping in the islands that can be depended upon.

Charles (Floreana) Island has one of the best anchorages in the archipelago, at *Post Office Bay*. The bay is of moderate depth and easy of access, but no fresh water is to be had. There is also good anchorage at *Black Beach Bay*.

In Indefatigable Island there is anchorage at *Conway Bay* in from 5 to 7 fathoms, with good landing for boats; there are also anchorages at *Baquedano Bay* and *Puerto Nuñez*. Water is obtainable at the last.

The best anchorage on James Island is in *James Bay*, where vessels can anchor in from 7 to 14 fathoms.

In Albemarle Island there is anchorage off the settlement at *Port Villamil* in 5½ to 7½ fathoms. There is, however, a heavy swell, and though a small mole has been constructed, landing is difficult, as access to it is obstructed by hidden stones near the surface of the water. *Tagus Cove* is a snug anchorage formed by an old crater, the width at the entrance being nearly half a mile. There are other anchorages at *Iguana Cove*, *Webb Cove*, *Isabel Bay*, and *Bahia Cartago*.

There is a fair anchorage off Abingdon Island, and landing can be effected a mile and a half to the northward of the anchorage. In Hood Island there is an anchorage on the north-east side, at *Gardner Bay*.

Free ports have been established in the islands, but it is provided that foreign merchandise transported from these ports to ports on the mainland shall be subject to customs duties, wharfage, &c., as if it had never entered the Galápagos Islands.

Trade with Guayaquil is carried on from Wreck Bay by a sailing schooner which comes to the island nominally once a month.

(4) *Wireless Communications*

In an article which appeared in *La Prensa* at Havana on February 8, 1918, it was stated that a wireless installation existed on Charles Island; and in September of the same year it was announced that the Marconi Company proposed, with the consent of the Government of Ecuador, to establish a wireless station on one of the islands.

(B) INDUSTRY

(1) *Labour*

It is provided by law that three-quarters of the colonists must be Ecuadoreans, and the executive is prohibited from contracting with foreign nations or foreigners for the colonization of these islands.

(2) *Agriculture and Products*

Though agriculture is the principal source of wealth in the islands, there are comparatively few people engaged in it, and only a small proportion of the land suitable for the purpose has been cultivated or cleared. Charles Island, which was the first to be settled, is now practically abandoned, and the settlements are in ruins, but it offers more advantages for farming than most of the other islands, as it has been partially cleared, and some tracks have been made.

The islands are fertile, producing fruit and vegetables, timber, and most sorts of grain except rice. Sugar-cane, oranges, and lemons ripen all the year round, and two crops of maize, coffee, and potatoes are obtained annually. Cotton is also found.

A product which was formerly important was *orchilla* or dyers' moss. Before the discovery of aniline dyes, this formed the basis for the manufacture of certain colours, and its collection was a profitable commercial undertaking.

A number of cattle, goats, horses, and swine were landed on these islands by General Villamil, and have greatly increased. The number of cattle in Albemarle Island alone in 1911 was stated to be about 40,000.

Formerly the principal product of the islands was the terrapin or land tortoise. These huge tortoises at one time swarmed over the islands; some specimens were over 5 ft. long and weighed as much as 600 lb. The tortoises were easy to capture, and they supplied ships with fresh meat. Oil was also extracted from them. Cheaper substitutes derived from petroleum have taken the place of this oil, but the number of the tortoises had already been vastly diminished.

(3) *Fisheries*

The fishing grounds of the group have been famous for years. Cod are numerous in the vicinity, and clawless lobsters and oysters are found on the rocks surrounding the islands. There appears to be a considerable future for these fisheries. The sea is calm, tempests and fogs are almost unknown, the situation is near the markets of South America, and the good climate and fertility of the islands would assure the rapid development of fishing settlements. The large local deposits of salt could be utilized for an industry in salted fish.

Seals were formerly very numerous in the waters of the archipelago. In 1914 a company engaged in the fishing industry in Southern Chile petitioned the Government of Ecuador for permission to fish for whales in the waters of the Galápagos Islands.

(4) *Minerals*

The sugar factory at Progreso is stated to be worked by *coal* mined in the island, but this coal is said to be of no use for steam vessels.

Lime is obtained from the rocks round Wreck Bay, in Chatham Island, and is exported to Guayaquil.

There are large deposits of *salt*. There are also a number of *sulphur* deposits, as might be expected in islands of volcanic formation; some investigators believe that these may prove to be a considerable source of wealth. In 1909 a sulphur mine was being worked on Albemarle Island.

(5) *Manufactures*

A sugar factory, using steam power, was established in 1886[40] at Progreso, on Chatham Island. Most of the inhabitants are employed in the factory, and the annual output is said to be as much as 3,000,000 lb.[41] The annual production of coffee on the Progreso plantation is about 300,000 lb., and of alcohol about 14,400 litres. The production of vinegar is another industry which employs a few people.

(C) COMMERCE

Hides, sugar, rum, vegetables, and fruit are exported to Guayaquil. No figures are available. There is also an export of cattle. It is stated that in 1914 the Chilean Ecuadorean Society contracted with Sr. Antonio Gil[42] for 5,000 head of cattle, to be delivered at Port Villamil for shipment to Chile.

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[40] See above, p. 15.

[41] The *Bulletin of the Pan-American Union* for November 1918 contains the latest information about the Progreso settlement.

[42] See above, p. 14.

APPENDIX

I

DISTANCES FROM FLOREANA (CHARLES ISLAND)[1]

(Galápagos Islands)

From.	Under steam.	Under sail.
	Miles.	Miles.
Plymouth	10,700	11,200
Valparaiso	2,130	2,130
Coquimbo	2,010	2,010
Callao	1,010	1,010
Guayaquil	660	660
Panama	910	980
San Francisco	2,850	3,180
Vancouver (island)	3,550	3,900
Honolulu	4.200	5,200
Suva, Fiji	5,400	6,540
Tahiti	3,570	5,100
Sydney, N.S.W.	6,910	7,250

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[1] From a memorandum by the (late) Hydrographer, Sir Frederic Evans, February 10, 1879.

II

NAMES GIVEN TO THE GROUP AND TO INDIVIDUAL ISLANDS AT DIFFERENT TIMES

Collectively: Las Islas de los Galápagos; Islas Galápagos; The Galápagos Islands; Islas Encantadas or Enchanted Islands; Archipielago de Colón.

Cowley's List in general use, 1684–85.	Old Spanish Names.	Other Stray Names.	Later List.	Torres and Vacaro's List.	Ecuadorean Names, 1892.
Chatham.	Santa María de la Aguada.	Grande.	—	—	San Cristóbal.
Hood.	Nuestra Señora de la Esperanza.	—	—	—	Española.
King Charles.	Mascarin.	San Marcos.	Floreana.	—	Sta. María.
Albemarle.	Santa Isabel.	—	—	Sta. Gertrudiz.	Isabela.
Narborough.	—	—	—	”	Fernandina.
James.	San Bernabe.	Carenero.	Olmedo.	Gil.	San Salvador.
Indefatigable.	Santiago.	Norfolk or Porter's Isle.	Chálvez or San Clemente.	Váldez.	Santa Cruz.
Barrington.	—	—	—	—	Santa Fé.
Abingdon.	—	—	—	—	Pinta.
Bindloe.	Diablo.	Quitasueño?	—	—	Marchena.
Tower.	Salud.	Eures.	Quitasueño?	Quitasueño?	Genovesa.
Culpepper.	—	Los dos Hermanos.	—	Guerra.	—
Wenman.	—		—	Núñez Gaona.	—
Jervis.	—	—	—	—	Rabida.
Duncan.	—	—	—	—	Pinzón.
Brattle.	—	—	La Tortuga.	—	—
Crossman.	Tabaco.	—	—	—	—

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MAPS

The Intelligence Division of the Naval Staff have issued a map of the Galápagos Islands, on the scale of 1:1,500,000, in connexion with this series.

JUAN FERNÁNDEZ

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Character

The islands of Juan Fernández are three in number: Más-á-tierra (Spanish, 'landward'), about 400 statute miles west by south of Valparaiso; Santa Clara or Goat Island, adjoining the former; and Más-á-fuera (Spanish, 'farther out' or 'seaward'), about another 100 miles farther west. All three islands lie between 33° 30′ and 33° 50′ south latitude, the first two about 79° and the third about 81° west longitude.

Más-á-tierra is of irregular form, 12½ miles in length from east to west, and 3⅔ miles across at its widest part, and possesses several small bays, though only one is suitable for shipping. The middle and eastern portions of the island consist of ridges and crags alternating with valleys, which were formerly thickly wooded, but have been much denuded by forest fires and improvident felling. The highest point, El Yunque ('the Anvil'), attains a height of 3,005 ft. The western section is less elevated, and presents an almost barren appearance; there are no craters or other visible traces of recent volcanic action. As the island is high and watered almost daily by showers, there are many small streams, some of which never fail.

Más-á-fuera covers a slightly larger area than Más-á-tierra, being 9 miles long by 6 miles broad, and lies more nearly north-west and south-east. It consists of a huge massif of rugged eruptive rock, scored on its eastern face by nine *quebradas* or ravines, most of which allow of no passage to the summit. Each ravine has its watercourse. The highest elevation is the

Cerro de los Inocentes (6,560 ft.). The shores are generally inaccessible.

Santa Clara, which is separated from the south-western extremity of Más-á-tierra by a strait one mile wide, is a small, desolate, rocky island between four and five miles in circumference, and about 1,230 ft. in height. It is almost treeless, but here and there is sufficient pasture to maintain a thousand goats. There is no permanent fresh water on it.

(2) CLIMATE

The climate of the islands is, speaking generally, temperate, healthy, breezy, and agreeable, though humid. The conditions vary considerably with the elevation; this is especially the case at Más-á-fuera, where fogs are frequent above 2,200 ft. and in the winter season frosts and snow occur.

The results of six years' observations at Más-á-tierra showed that the mean summer temperature was 67° F. (19½° C.), the mean winter temperature 54° F. (12° C.), the absolute maximum 93° F. (34° C.), and the absolute minimum 39° F. (4° C.). The wettest months were from May to August, and the mean annual rainfall was 40·5 in., while the monthly mean humidity varied between 74 and 81 per cent.

The prevailing winds are from the south and south-east in the dry season, and from the south-west in the rainy months. Gales from the north occur in winter.

(3) SANITARY CONDITIONS

There are no endemic diseases, and the general health of the population is good.

(4) RACE AND LANGUAGE

With the exception of a few individuals of European birth, the people are of the Hispano-American type and character generally met with on the South American continent, from which the majority of the settlers and labourers are migrants. The only language in general use is a more or less corrupt Spanish.

(5) POPULATION

The whole population, which in 1916 numbered 300, is concentrated in the settlement at Cumberland Bay in Más-á-tierra, named San Juan Bautista. At Más-á-fuera there have rarely been more than fourteen persons resident at any one time; usually none at all.

II. POLITICAL HISTORY

Chronological Summary

1563–74. Islands discovered by Juan Fernández.
1616–23. Visited by two Dutch expeditions.
1664. Visited by *Fr*. Diego de Rosales.
1665–1750. Terra nullius. Visits of Anson's squadron, Juan and Ulloa, Veas.
1749. Islands formally declared a Spanish possession.
1750. Más-á-tierra occupied by a Spanish garrison and colonists.
1751. Settlement overwhelmed by earthquake wave.
1752–1814. Settlement restored; it becomes a place of banishment for malefactors and political rebels.
1814. Más-á-tierra temporarily abandoned.
1817. Renewed evacuation of Más-á-tierra.
1819. Chile declared an independent republic. The islands pass into its possession.
1822. Más-á-tierra again abandoned.
1829. Penal settlement established.
1835. Another earthquake wave causes serious damage.
1837. Chilean garrison capitulates to Peruvio-Bolivian squadron. Más-á-tierra evacuated and exiles dispersed.
1842. Incorporated in province of Valparaiso.
1847. Lease granted to Pascual Cuevas.
1851. Rebels banished to Más-á-tierra; revolt of *déportés*.
1854. Final abandonment of penal settlements at Más-á-tierra.
1867. Lease granted to F. Flindt, a North American, but transferred to the brothers Fernández López.
1877. Lease granted to Alfred de Rodt.
1893. Lobster cannery established by Fonck Bros.
1895. Islands visited and examined by Chilean Colonization Commission.
1909. Penal settlement formed at Más-á-fuera.
1913. Penal settlement abandoned.
1915. German cruiser *Dresden* sunk in Cumberland Bay.
1916. The islands botanically explored by Dr. Skottsberg, of Upsala.

(1) Discovery and Early Settlements

The islands of Juan Fernández were discovered by Juan Fernández, a Spanish or Portuguese navigator, when making the passage from Callao to Valparaiso,[1] at a date which can no longer be stated with exactitude, but certainly not earlier than 1563 nor later than 1574. The islands were then uninhabited, and no traces of any bygone human occupation have been found on them. Early Spanish writers allege that the discoverer seized the opportunity to land three or four goats at Más-á-tierra, and that he applied (through the President of Chile) for a patent of proprietorship.[2] The Jesuit Diego de Rosales, who wrote between 1660 and 1674, affirms[3] that Juan Fernández himself was the first founder of a settlement at Más-á-tierra, and that he and certain Spaniards who accompanied him introduced seventy 'Indians' from the continent, brought the *nuclei* of future flocks and herds, built houses of timber and thatch, and made considerable profits by exporting sea-lions' oil[4] and salted fish to Peru and the Chilean ports. But this early enterprise did not prove a lasting success; for the island was abandoned between 1580 and 1585, and Juan Fernández died at Quillota before 1604. He made over his island to a friend (not a relative) of his own name, one Juan Fernández Rebolledo. This person made no use of the gift; but, having in after life joined the Jesuit Order, he endowed the College of the Order at Santiago de Chile with all his worldly goods, including the island of Más-á-tierra. After his death certain 'other Spaniards went there to exploit the timber and the fishery, for a while; after which it lay deserted during many years'.[5]

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[1] A. de Ulloa, *Relación histórica*, II, iv.

[2] Some accounts relate that a patent was granted him; others declare specifically that none was issued. It is probable that the negation represents the truth; and that the contrary, where stated, is merely an assumption.

[3] D. de Rosales, *Historia de Chile*, vol. i, p. 285.

[4] Elephant seals' oil.

[5] Rosales, *op. cit.*

Meanwhile, the goats multiplied prodigiously, and pigs also throve; for, when the Dutch explorers Schouten and Le Maire put in there in 1616, they noticed animals of both these kinds, and others which they could not identify at a distance.[1] These voyagers were the first of a long series of callers to make Más-á-tierra a port of refreshment on the voyage from Europe round Cape Horn. Other Hollanders, of the 'Nassau Fleet' under Jacques l'Hermite, visited the islands in 1623; and the historians of that enterprise were the first to mention sandalwood as one of the natural products of the island. Six of their men were permitted to remain in the island, of their own choice,[2] and thus became the pioneers of many small parties and single individuals who, from time to time, essayed to eke out an existence at Más-á-tierra. Popularly-known examples of these were 'William' (a Mosquito Coast native) from 1681 to 1684, and Alexander Selcraig (Selkirk) from 1704 to 1709.

In 1664 Diego de Rosales, then filling the office of Provincial of his Order at Santiago de Chile, paid a visit to Más-á-tierra with a view to the establishment of a settlement there 'in order that Religion might profit by whatever usufruct the island can yield';[3] but no settlement resulted. A few sealers and fishermen seem next to have paid occasional visits to the island; and between the years 1679 and 1687 it was a favourite resort of buccaneers. These were followed by letter-of-marque ships, both English and French, in the early years of the eighteenth century. During the inroads made on Spanish commerce by these adventurers, several languid efforts were put forth by the authorities at Lima to counteract the utility of the islands of Juan Fernández to the enemy; but it was not until reports of Commodore Anson's sojourn there in 1741 were made public, and the benefits that his scurvy-stricken crews received from its resources became known, that the

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[1] W. Schouten, *Journael.*

[2] A. Decker, *Journael.*

[3] D. de Rosales, *op. cit.*

Court of Madrid was at length roused to take active measures for permanently occupying and fortifying the place. Up to this time it had been a 'no-man's-land', but on May 7, 1749, King Fernando VI signed a decree proclaiming Spanish sovereignty over the 'island' of Juan Fernández, and directed that it should be immediately colonized and placed in a state of efficient defence.[1]

(2) Period of Spanish Sovereignty (1749–1819)

The execution of the King's command was entrusted by the Viceroy to Don Domingo Ortiz de Rosas, the President of Chile, and the necessary measures were executed in 1750. But in the following May the settlement was overwhelmed by an earthquake wave, most of the buildings being destroyed; and the Governor, his family, and thirty-five other persons, were swept away and drowned. Steps were taken to relieve the survivors and rebuild the barrack and dwellings; and a new Governor was installed.[2]

From that time forward until 1817 the colony passed through many vicissitudes under the rule of fifteen successive Spanish Governors. From its original status of a protected industrial Crown Colony it was transformed into a military garrison; and from a mere military garrison it degenerated into a State prison of grossly irregular type, a condition it maintained with more or less variation until 1814. By 1810 the abuses, insubordination, and crime that prevailed at the island had become so notorious that murmurings against its continuance as a penal settlement were heard in Chile, where revolutionary sentiment was already gathering force. In 1814 Más-á-tierra was, in fact, abandoned, and the garrison and convicts were withdrawn to the mainland, Don Manuel de Santa María being its last governor under the Spanish Crown.

Chile was by this time involved in internal strife, and rebellion against the mother country was imminent.

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[1] B. Vicuña Mackenna, *Juan Fernández*, p. 268.

[2] *Ibid.*

The battle of Rancagua, in which the royalists were victorious, was fought on October 2, 1814; and shortly afterwards, fifty selected 'patriots', that is, revolutionaries, were summarily deported to Más-á-tierra in circumstances of great hardship. Many others were similarly exiled during the two succeeding years. But the situation was reversed in 1817 by the success of the 'patriot' army at Chacabuco, which, among its more momentous consequences, led to the renewed evacuation of the island early in the same year.

Between the years 1797 and 1805, Más-á-fuera was much frequented by British and North American sealers. According to one shipmaster, not less than three million skins of the Antarctic fur-seal were carried from thence to Canton in those seven years; and it is even said that a million pelts once went to London in a single ship.[1] These proceedings were abruptly stopped in 1805 by the Viceroy Avilés of Peru, who dispatched the *Peruano* frigate to capture or expel the foreign sealing gangs.

Más-á-tierra, about this time and for several decades afterwards, was a good deal frequented by whalers, whose ships made it a port of call for water, wood, and refreshment. Sandalwood was also exploited at the island in those days, especially during the administration of Manuel Martinez in 1836, who made the sale of it one of the perquisites of his office.[2]

(3) FIRST PERIOD OF CHILEAN DOMINION (1819–67)

Chile proclaimed its independence in 1819, and the islands of Juan Fernández passed *ipso facto* into the possession of the Republic. Two years had scarcely elapsed (during which two Chileans and a Spaniard formed the entire population of Más-á-tierra) when the new Government resolved to make use of the island as a place of confinement for its political opponents, especially the followers of Carrera. The exiles were sent thither in June 1821, in the custody of Lieut.-Col. Palacios, and were treated with harshness. In three months' time Palacios was deposed and put under arrest by his own garrison. Anarchy, bloodshed, piracy, and escapes followed this event, with the result that by February 1822 the island was again abandoned, and the experiment ended.[1]

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[1] A. Delano, *Narrative*, p. 196, &c. Also E. Fanning, *Voyages*, pp. 108–18; and B. Morrell, *Narrative of four voyages*.

[2] Vicuña Mackenna, *op. cit.*, pp. 569–70.

Little happened in the islands after this until 1829, when the Government of the Republic again decided to use them as a penal settlement; but on this occasion an extraordinary scheme was adopted, by which the colony and convicts were farmed out to a private person, under what was termed a 'contract of lease', the lessee being described as *el empresario*, or contractor. The conditions were approved by Congress on January 30, and the document was signed four weeks later. The contractor was José Joaquín Larrain, of Santiago. He was bound to maintain one hundred prisoners in the island, or more if required, and was to receive a *real* per head per diem. He was granted the monopoly of their labour and exclusive right of trading in the island; and he was allowed to depute any person of his choice to reside there in his stead, and carry out the duties required of him under the contract. A guard of twenty-five soldiers under an officer was provided by the Government.[2] The inevitable result of this strange arrangement was a mutiny of the garrison, who put the deputy governor under arrest (Larrain himself not being in the island), seized the first whale-ship that called, and compelled the master to convey them, to the number of 13 soldiers, 104 convicts, and 7 women, to Copiapó and other ports on the mainland. Larrain revisited the island in 1832, but was soon back again at Valparaiso, where he was assassinated.

In 1833 a new Constitution was proclaimed in Chile,[3] under which the islands of Juan Fernández became definitely incorporated in the province of Santiago. But in 1842 they were joined to Valparaiso, when this province was reconstituted by an act of Congress, and from 1851 they were administered as a sub-delegation thereof.[1] This arrangement was confirmed in 1888[2] and still holds good.

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[1] Vicuña Mackenna, *op. cit.*, chap. xxii.

[2] The terms of the contract and the military orders of 1832 are printed in Vicuña Mackenna's work, pp. 492 *et seq.*

[3] Cf. Appendix, p. 58.

The next three governors of the islands were Antonio Hurtado (1833–4), Colonel Latappiat (1834–5), and an English adventurer named Sutcliffe. The first of these proved a failure through ineptitude; each of the others brought about an insurrection among the guards and prisoners, and was deposed, after causing several illegal executions. Sutcliffe had the further misfortune to lose all his effects in 1835 through another inundation by an earthquake wave, which washed away nearly all the houses in the settlement, though without causing any loss of life. It was followed during the night by a remarkable submarine eruption of flames and smoke, about a mile from the beach, in deep water.[3]

In 1837 the settlement was suddenly called upon to surrender to a squadron of three Peruvio-Bolivian ships commanded by Don Trinidad Morán, and had to comply. The political exiles were immediately liberated, and most of them were given a passage to the continent in Morán's ships. The garrison and the few remaining persons soon afterwards abandoned the settlement; and during the ten years that followed Más-á-tierra was peopled only by occasional waifs and strays, and by a family, perhaps best described as 'free selectors', named Maurelio, who made a living by selling live stock and other provisions to whalers. In 1847 Don Pascual Cuevas, who had once lived in the island as a political exile, obtained a lease of it from the Government for purely commercial purposes; but he died soon afterwards, and his assets passed to the house of Soruco Brothers, Bolivian merchants of La Paz.

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[1] Vicuña Mackenna, *op. cit.*, p. 663.

[2] A. Echeverría y Reyes, *Geografía*, pp. 165, 184.

[3] A. Caldcleugh, pp. 25–6; T. Sutcliffe, *Earthquake.*

They sent a Chilean subject, by name Soto, as manager to reside at Más-á-tierra; and the Government conferred upon him the post of Sub-delegate (corresponding to Administrator or Resident Commissioner). But in 1851 the Government of Chile once more sent political offenders and other prisoners to the island. A contract for their maintenance, labour, and control was made with the Soruco firm; and Soto, in his triple capacity as sub-delegate, custodian, and caterer, treated his compatriots with leniency. Nevertheless, within a few months, the result was the same as before; vessels were seized, and the rebels, taking Soto with them (with or without his connivance), made their way to the mainland. Thus the island was again abandoned, save by a small handful of voluntary settlers.

Once more, in 1852, the Government peopled the settlement with *déportés*, and again they revolted. This time the conspiracy was denounced by one of its members, all of whom had been accomplices in Chile of the notorious Cambiaso. The leaders, to the number of four, were condemned and shot the next day.

In 1854 the military command was finally withdrawn; and the occupation of Más-á-tierra as a penal settlement came to an end.[1] It is stated, however, that the experiment was renewed at Más-á-fuera in 1909, but abandoned in 1913.[2]

Between the years 1854 and 1867 the history of the islands of Juan Fernández has little political importance; and, as Vicuña Mackenna remarks,[3] their long period of romance and drama was brought to a close in 1868 with the erection, near one of the summits of Más-á-tierra, of a tablet in memory of 'Alexander Selkirk, mariner', by Commodore Powell and the officers of H.M.S. *Topaze.*[4]

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[1] Vicuña Mackenna, *op. cit.*, chaps. xxxii, xxxiii.

[2] C. Skottsberg, in the *Geographical Review,* May 1918, p. 375.

[3] *Op. cit.*, p. 832.

[4] Vicuña Mackenna, *op. cit.*, pp. 737–8, 742; E. Albes, *Bulletin of the Pan-American Union*, 1914, p. 213 (photograph).

(4) SECOND PERIOD OF CHILEAN DOMINION (1867–1914)

In December 1867 the Government granted a lease of the islands to Fernando (Hermann ?) Flindt, a North American ship-chandler, of Valparaiso, at a rental of $500 annually. He seems to have entered into possession by his attorney, Robert Wehrdan, on January 7, 1868.[1] Failing to fulfil certain stipulations embodied in the lease, the house of Flindt transferred its interest in the islands to the brothers Miguel and Antonio Fernández López, sons of a Portuguese merchant at Valparaiso. This arrangement terminated in 1876 with the failure of the elder brother at Más-á-tierra, and the death of the other, who had settled and wasted his capital at Más-á-fuera.[2] When the Chilean corvette *Chacabuco* called at the islands in April of that year, her commander, Don Oscar Viel, found the community to comprise only 64 persons (29 men, 13 women, and 22 children); and 10 of these returned in his ship to the continent.[3]

The next disposal of the islands was by a lease granted by the Government in 1877, at an annual rental of $2,500, to Alfred de Rodt, a man of Swiss birth. De Rodt was appointed Sub-delegate at Más-á-tierra, and must therefore have become a naturalized Chilean. De Rodt was personally known to the late Sr. Vicuña Mackenna, who testified to his character and honesty of purpose, and stated that he governed the people with fairness and consideration;[4] but the results to himself of his venture are summed up in the Colonization Commission's report in 1895 as 'nothing, except the entire loss of his capital of $65,000 of good money at forty pence the dollar'—a misfortune which was attributed to De Rodt's lack of energy and initiative.[1] As Sub-delegate he filled all the subordinate civil posts in the island, doing duty as magistrate, customs officer, harbour-master, pilot, postmaster, and verderer.

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[1] Vicuña Mackenna, *op. cit.*, pp. 743–4; *Chambers' Journal*, 1888.

[2] Vicuña Mackenna, *op. cit.*, pp. 746–8.

[3] *Anuario Hidrográfico*, Año iv, pp. 17–23.

[4] Vicuña Mackenna, *op. cit.*, chap. xxxvii.

The Colonization Commission was organized in 1895 to inquire into existing conditions in the islands of Juan Fernández (and certain other places), and to advise the Government on questions of administration, population, and commerce in respect of those localities. The members of the Commission visited Más-á-tierra; but those who went on as far as Más-á-fuera were unable, owing to rough weather, to land there. Their report[2] on the islands contains no recommendations of practical utility, and no serious action has resulted from it. They found 53 inhabitants at Más-á-tierra, but there were then none at Más-á-fuera. The chief industry was the ‘cod’ fishery, coupled with the lobster catch: the latter being in the hands of Messrs. Fonck Brothers, of Valparaiso, who founded it as a regular business in 1893. Dog-fish were also taken, for the sake of the oil which is extracted from their livers. A small number of goat-skins were cured annually for domestic use and for local sale; and a few fur-seals' pelts were got from the islet of Santa Clara, and at intervals from Más-á-fuera; but at this last island many of the kids and seals' cubs were annually destroyed by sea-eagles and wild dogs.

The police at Más-á-tierra were stated to be of no service, consisting only of four invalid pensioners; the population was nevertheless orderly, though its social life was morally discreditable.[3] The Commission also reported that the natural timber supply of Más-á-tierra had been seriously diminished in the last sixty or eighty years by indiscriminate felling, failure to replant, and fires. The western portion of the island was never heavily wooded and is now virtually barren.

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[1] *Memoria del Ministro*, p. 245.

[2] *Ibid.*, pp. 225–343.

[3] *Ibid.*, pp. 237, 241, 254.

(5) SINKING OF THE 'DRESDEN' AT MÁS-Á-TIERRA[1]

The most notable occurrence in the islands of Juan Fernández since the outbreak of the European War was the sinking of the German cruiser *Dresden* in Cumberland Bay on March 14, 1915. That vessel was the last remaining ship of the enemy's squadron engaged off the Falkland Islands on December 8. After escape from pursuit on that occasion she took refuge in the Straits of Magellan, and succeeded in coaling at Punta Arenas, where she committed a breach of Chilean neutrality and overstayed the 24 hours' limit. She next lay concealed for more than two months in the maze of channels adjoining the Chilean archipelagoes south of Chiloé, and got into wireless communication with two German steamers with a view to their meeting her at Más-á-tierra.

On March 9, 1915, she sank the British ship *Conway Castle*, laden with grain, in the neighbourhood of Más-á-tierra. Arriving at Más-á-tierra on the same day her commander requested permission from the 'Maritime Governor' to remain there eight days, in order to make good alleged defects in machinery. This permission was refused, and the German was officially warned that he must leave within 24 hours or submit to internment of the ship and crew. At the end of the 24 hours the *Dresden* had not left; and the Chilean Governor, having notified her commander that he had incurred the penalty specified, immediately reported the situation to the Government of the Republic. On March 14 H.M. ships *Glasgow* and *Kent*, with the British transport *Orama*, appeared in the offing. Meanwhile, it is stated, the German had been in frequent communication by wireless telegraphy with her two confederates, the S.S. *Alda* and *Sierra Cordoba*, which thereupon immediately left Valparaiso, without permission from the Chilean authorities, laden with coal.

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[1] The particulars of this incident are related from the telegraphic accounts and diplomatic notes published in *The Times* newspaper on March 16 and 19, and April 16 and 21, 1915.

When the British squadron arrived off Cumberland Bay the *Dresden* was still at anchor there, about 500 metres from the shore, and the *Glasgow* at once opened fire upon her. The *Dresden* was hit, and hoisted a flag of truce under which an officer was sent from her to inform the commander of the *Glasgow* that the German ship was in neutral territorial waters. The British commander is alleged to have replied by summoning the German to surrender, and to have warned him that, if he refused, the ship would be destroyed. The captain of the *Dresden* then sent his crew ashore and ordered the magazine to be exploded and the ship to be sunk, which was immediately done. Eight or nine Germans were killed and fifteen others wounded by the *Glasgow's* gun-fire, and considerable damage was done to the *Dresden's* hull. The wounded and the remaining 360 officers and men of the enemy ship were afterwards conveyed in the *Orama* to Valparaiso Bay, for internment at the island of Quiriquirina, near Talcahuano. The German Minister at Santiago submitted a statement of the incident to the Government of Chile, and, while representing that the *Dresden* was blown up and sunk by her own crew at the time they abandoned her, he entered a protest against what had occurred and made a claim for reparation. The Chilean Government immediately dispatched two of its ships to Más-á-tierra to investigate the facts; and, before the end of March, Notes were exchanged on the subject between the Chilean Minister in London and Sir Edward Grey, Foreign Secretary. The former, writing on March 26, related the details above recapitulated, and added that the Chilean Government had been painfully surprised by the act of hostility committed in Chilean territorial waters. They were convinced, he remarked in conclusion, that His Britannic Majesty's Government would give them satisfaction of a character to correspond with the frankly cordial relations existing between the two Governments.

Sir Edward Grey, in reply, pointed out that, so far as he then knew, it appeared that the commander of the *Dresden* had not accepted internment, that his ship was still flying the German war flag, and that she had her guns trained when the *Glasgow* opened fire. 'Nevertheless,' he added,

> His Majesty's Government, after receiving the communication from the Chilean Government of March 26, deeply regret that any misunderstanding should have arisen which should be a cause of complaint to the Chilean Government; and, on the facts as stated in the communication made to them, they are prepared to offer a full and ample apology to the Chilean Government.

With this the incident was closed.

III. SOCIAL AND POLITICAL CONDITIONS

(1) Religious

A chapel was in course of being built at the settlement on Más-á-tierra, when, in the second year of occupation by the Spanish Crown, it shared in the destruction wrought by the earthquake wave of 1751. It was rebuilt in 1774, and again in 1811, but was finally ruined by the inundation of 1835;[1] and the Colonization Commission reported in 1895 that no permanent place of worship had since been provided. It was usual to appoint a *cura* or parish priest with each resettlement of the island; but at the time of the Commissioners' visit there was no resident cleric, and only two couples were legally married, while of the 53 persons then constituting the population, 9 (all under eighteen years of age) had not been baptized. The only Protestant on the island was then Alfred de Rodt, the lessee and Sub-delegate in charge; the other 43 baptized persons professing the Roman Catholic faith.

(2) Political

The history of the islands of Juan Fernández shows that the administration of affairs there was one long series of misgovernment and abuses during the Spanish occupation and far into later times. Not until after the middle of the nineteenth century did more reasonable and humane measures lead to quietude and order among the population. The Colonization Commission in 1895 reported that 'a competent, energetic, and industrious administration might convert the islands into a rich and flourishing colony';[1] but in view of the limited nature of their internal resources, and their natural isolation from centres of trade, this must be regarded as an optimistic opinion. At present the population of Más-á-fuera is *nil* or negligible, and that of Más-á-tierra a mere handful of people. For their control a resident official termed a Sub-delegate is appointed, apparently by the Chief of the Province of Valparaiso, and he exercises the powers and performs the duties of all the Government official posts.

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[1] Vicuña Mackenna, *op. cit.*, p. 379; T. Sutcliffe, *Earthquake*.

(3) EDUCATIONAL

It does not appear that any public instruction or private teaching has ever been given in these islands. The Colonization Commission found that the 21 children and young persons under 18 years of age were 'ignorant, for the most part, of the rudiments of knowledge'; and it was recommended that, if the Supreme Government should decide to establish a teacher at Más-á-tierra in the future, night-classes should be provided for the benefit of adults engaged in labouring occupations during the daytime.[2]

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[1] *Memoria del Ministro*, pp. 324–5, 333–4.

[2] *Ibid.*, p. 319, &c.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(a) *Roads, &c.*

THE few roads that were made in the last century have been obliterated by storms, and Dr. Skottsberg states[1] that there remain only three narrow and miserable cattle-trails leading from Cumberland Bay to other parts of Más-á-tierra. One of these crosses the *portezuelo*, or pass, at 1,800 ft. above the sea.

There are no internal telegraphs or postal services.

(b) *Ports*

The only port is Cumberland Bay, on the north side of Más-á-tierra. It is rather more than a mile in width across the entrance, and extends inwards about two-thirds of a mile. The anchorage is not very secure, owing to the rapid shelving of the rocky bottom, and the violent gusts which descend from the mountain when southerly winds are blowing. The bay is exposed to the north. A small mole has been constructed, and there are facilities for taking in fresh water from an adjoining stream.

(c) *Shipping*

Three schooners, furnished with wells for the carriage of live lobsters, keep up communication with Valparaiso at irregular intervals, nominally once a fortnight, and bring the dry provisions, soft goods, and hardware required by the settlers. They also visit Más-á-fuera occasionally. Más-á-tierra is visited at intervals by vessels of the Chilean navy.

At present the shipping facilities seem to be adequate to the needs of the islands, and there is not much scope for further development of trade. No doubt regular steam communication would be acceptable to the islanders and to Valparaiso merchants, but it could hardly be maintained without Government aid.

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[1] In the *Geographical Review*, May 1918.

(*d*) *Wireless Telegraph*

On July 5, 1912, the Government of Chile ratified the Wireless Telegraphy Convention at London;[1] and in the *Bulletin of the Pan-American Union* of October in that year it was announced that the installation of a wireless station at Juan Fernández was nearing completion. But in the list of wireless stations maintained by the Government of Chile enumerated in the same *Bulletin* of September 1915, Juan Fernández was not mentioned; nor was it named, in the issue of March 1916, among those opened for public use.

(B) INDUSTRY

(1) LABOUR

The local supply is numerically negligible; the residents are all natives, and the services of the few men are indispensable to the fishing industry. The islands offer the means of living to a small number of industrious settlers, but nothing more.

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

Vegetable Products.—The agricultural prospects of these islands are poor. In Más-á-fuera agricultural enterprise is out of the question; in Más-á-tierra it is possible in scattered areas, but has never met with much success, owing to the limited space available, the strong winds, the lack of system and capital, and the insecurity of tenure (see below, p. 56). Where the soil is deep it is fertile, and in such localities there is no scarcity of water. Experiments have shown that maize, wheat, and barley can produce 30-fold, 4-fold, and 8-fold respectively, but the crops that have flourished best are lucerne and a kind of chick-pea, for which there is only a small local demand and no possibility of export. Vegetables and subtropical fruits flourish. Nearly all the native families successfully cultivate gardens, in spite of occasional plagues of rats and caterpillars. There is no farming for commercial purposes.

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[1] *Bulletin of the Pan-American Union*, August 1914, p. 323.

Live-stock. — In Más-á-tierra farm-stock do well, except horses, which seem to degenerate. The chief animals kept are goats, donkeys, mules, sheep, poultry, and pigeons, but horned cattle also thrive in suitable places, though they cannot be kept in great numbers, owing to the lack of fences. Pigs would do well, if they were confined and properly fed.

In Santa Clara there are many goats, while in Más-á-fuera about 1,500 run wild on the heights, in spite of the fact that the kids are attacked by wild dogs and by *aguiluchos,* savage and voracious sea-eagles or buzzards peculiar to this island. (See also above, p. 47.)

(*b*) *Forestry*

Systematic arboriculture under Government inspection and control, with a view to judicious afforestation, has been officially proposed, and seems very desirable; but to plant on the exposed slopes would not be easy, for the soil is loose and scanty.

The most valuable of all the indigenous trees, *Santalum fernandezianum,* is now extinct in Más-á-tierra, though a few specimens are believed to linger in Más-á-fuera. Next in reputation is the *chonta* palm, *Juania australis*; but this also has become rare in the accessible valleys, having been ruthlessly cut and exported on account of its handsome wood, used for walking-sticks. It is now protected by a Government regulation

(c) *Land Tenure*

All the land is State property, and has usually been let as a whole to a single lessee. This practice, which the Government of Chile adopted in 1847, has no doubt discouraged agriculture. The leases, drawn for short terms of years, were liable to compulsory cancellation, and were terminable by agreement at six months' notice. Sub-tenants naturally refrained from expending capital or labour on land of which their tenure was not secure The primary lessee usually turned his attention to cattle-raising rather than to planting, in order to have beef, pork, and goats to sell to whalers and other callers. He employed the settlers to cut and collect firewood recklessly for the same purpose, paying them for their labour in imported goods at extravagant prices, so that they were generally in his debt. His cattle wandered at large, so that no field cultivation was possible without fences, which it was not to his interest to provide, and which the people themselves could not afford to put up.

(3) FISHERIES

Down to the beginning of the nineteenth century the fur-seal and the sea-lion or elephant-seal frequented the shores of these islands in vast numbers. By unrestricted slaughter for the sake of their skins and oil, the elephant-seals have been exterminated, and the fur-seals have been reduced to a few thousands, even in the breeding season. Before they are able to swim the seal cubs are preyed upon at Más-á-fuera by the sea-eagles and wild dogs.

Fishing[1] forms the backbone of the island trade, the lobster catch being the most important. The Fernandian lobster is a large crustacean (*Palinurus frontalis*), perhaps the finest of its kind in the world, found only near these islands and near the desert cluster of San Félix and San Ambrosio, on the same suboceanic bank, some 450 miles to the northward. This lobster attains a length of from 2 to 3 ft., and is much appreciated in Chile. The tails, which are especially esteemed, used to be exported dried, but a canning factory was established in 1893, and a second one more recently. The products of these factories, and also quantities of live lobsters, are exported to Valparaiso in the schooners already mentioned.

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[1] See above, p. 47.

The fishery next in importance is for *bacalao*, a local variety of cod. Conger, bass, and dog-fish are also caught, these last for the sake of their oil.

(4) Minerals

No minerals of any commercial value have been discovered, nor is the geological formation of the islands of a kind to make their presence at all likely.

(C) COMMERCE

The population in 1916 numbered 300, almost all of whom are employed in and dependent on the fisheries.

(D) FINANCE

No statistics are available. The Chilean currency is in circulation. The fisheries form the main field of investment.

APPENDIX

EXTRACT FROM THE ACT OF CONSTITUTION OF THE REPUBLIC OF CHILE

CAP. I, ART. 1.—El territorio de Chile se extiende desde el Desierto de Atacama hasta el Cabo de Hornos, y desde las Cordilleras de los Andes hasta el mar Pacifico, comprehendido el archipiélago de Chiloé, todas las islas adyacentes, y las de Juan Fernández.[1]

(*Translation*)

CAP. I, ART. 1.—The territory of Chile extends from the Desert of Atacama to Cape Horn, and from the mountain chain of the Andes to the Pacific Ocean, and includes the archipelago of Chiloé, all the adjacent islands, and those of Juan Fernández.

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[1] *Recopilación de Leyes y Decretos.* Santiago, 1888.

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[1] Many discrepancies and some mis-statements occur in most of these works.

HANDBOOKS PREPARED UNDER THE DIRECTION OF THE
HISTORICAL SECTION OF THE FOREIGN OFFICE.—Nos. 141 and 142

MALPELO, COCOS,
AND
EASTER ISLANDS

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MALPELO ISLAND

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I. GEOGRAPHY

(1) Position

Malpelo is an islet of bare rock situated some 270 miles south-west of the Gulf of Panama, in latitude 3° 59′ north and longitude 81° 34′ west.

(2) Surface and Coast

The island is about one geographical mile in length from north-east to south-west, and 700 yards in width. Five small rocks or *farallones* lie a few hundred yards distant from its south-west end, three others off its north-east extremity, and two more towards the south-east.[1] All are surrounded by deep water, and the face of the main island is for the most part extremely steep. Soundings of between 1,000 and 1,500 fathoms are obtainable within a few miles of the shore, and there are strong and changeable currents.

From the sea-level the rocks of Malpelo rise sheer out of the water, and the crowning summit attains a height of 846 ft.[2] Landing is all but impracticable.

(3) Climate

From its geographical position and what is generally known of the neighbouring seas and coastal region, it may be assumed that the atmosphere around the rock is hot and humid, and the winds variable.

(4) Population

There are no inhabitants.

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[1] Admiralty Plan, No. 1936.

[2] *The South America Pilot,* Part III, 469.

II. HISTORY

CHRONOLOGICAL SUMMARY

1530. Malpelo said to be recorded in a map of this date.
1542. President Vaca de Castro's visit.
1550. Malpelo recorded in P. Desceliers' map.
1790. Spanish landing on Malpelo mentioned to Malaspina.
1793. Colnett's visit.
1837. Note in *Nautical Magazine* recording visit.
1891. Visit of Agassiz.

HISTORICAL SKETCH

BEING uninhabited, Malpelo has no political history. It is, however, not devoid of interest, for there is good reason to believe that of all the Pacific Islands situated near, but out of sight of, the American continent this was the first one ever discovered by seamen sailing from its ports. Malpelo is stated to be shown upon a map of what was then known of Peru, published by command of the Emperor Charles V, in 1530.[1] The chronicler, Pedro de Cieza de León, who was a participator in many of the events he has recorded, wrote that the ship in which the President Vaca de Castro travelled from Panama to Buenaventura in 1542, 'came to a rocky islet called by the sailors Mal Pelo'—as if they were previously well acquainted with it.[2] On a very large and beautifully executed parchment map of the world as then known, 'Faicte a Arques par Pierres Desceliers P̃bre, lan 1550', the island appears in its true position, but is called 'y^e mallabry';[3] and it is found (marked, by a slip of the cartographer's pen, as 'Mapelo') both on Gerard

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[1] Liévre, D., in the *Revue de Géographie*, xxxii. 350.

[2] *Guerra de Chupas*, chap. 26.

[3] 'Malabrigo' (shelterless) was a name bestowed by Spanish discoverers on several islands and bays in early times. Desceliers' map is preserved in the British Museum.

Mercator's map of 1569 and Ortelius' '*Americae, sive novi Orbis, nova descriptio*', dated the following year. Later on, its presence on the maps became intermittent, even to the present day; and it does not figure in Vergara y Velasquez's Colombian Atlas revised by Codazzi to 1891, nor (where it should be) on the British Admiralty chart, No. 3318, published in 1903, though a separate inset is given of it on Plan No. 1936.

Antonio de Herrera mentions Malpelo as 'a small islet where there are fine *cinaloes*'[1] (the meaning of which word is obscure) and says no more about it; but he seems to associate it with the group of the Ladrone Islands much farther west.

Antonio de Alcedo includes it in his *Diccionario Geográfico-Histórico* of 1787, and describes it very briefly like the rest; he places it 'eighty leagues from the Gulf of Panama'. The Spanish commodore, Malaspina, who commanded the sloops *Descubierta* and *Atrevida* on a 'politico-scientific' voyage between 1789 and 1794, is the only explorer whose records[2] mention a landing on Malpelo. One of his officers[3] reported that he had been informed that

> 'one of the shipmasters in the local trade, favoured by fine weather and a smooth sea, once landed on a shelf of rock on the north face of the island, and after clambering up thirty steps hewn out by hand, came upon a large pool of rain-water, which was not over clean and had some birds' feathers in it; but being much put to for fresh water he used the opportunity to fill some casks. This', adds the officer, significantly, 'is all that can be said about Malpelo.'

His note was written in 1790, and the concluding remark is applicable still. The same passage forms the only reference to Malpelo quoted in Don Antonio Cuervo's collection of previously unpublished archives relating to Colombian history and geography.[4]

From the time of its discovery Malpelo was considered a part of the King of Spain's dominions by divine right and in virtue of the Alexandrine Bull of 1493, as modified by the Treaty of Tordesillas, which was ratified by the Popes Julius II in 1506 and Leo X in 1514. The principle of sovereignty on the basis of that treaty over all westward islands or continents discovered or to be discovered in the Pacific Ocean—as far even as the Solomon archipelago—was repeatedly affirmed by Viceroys of Peru. Since the period of national independence succeeded to the colonial period of Spanish ascendancy in South America, Malpelo has passed automatically from the mother country to the Republic, firstly of Peru, and now of Colombia. It does not appear that its inclusion in Colombian territory has ever been disputed, and it is shown on modern atlases as an appurtenance of that state.

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[1] *Descripción de las Indias occidentales*, ii. 60.
[2] *Viaje político-científico alrededor del Mundo*, p. 551.
[3] Don Fabio Ali Ponzoni: then a sub-lieutenant.
[4] Cuervo, A., *Colección de documentos*, &c.

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Extent

Cocos Island lies in the eastern Pacific Ocean in latitude 5° 35′ north and longitude 87° 2′ west (Chatham Bay). The nearest point on the mainland of Central America is Cape Salsipuedes in the Republic of Costa Rica. Its distance from Panama is about 540 miles.

The island is about 4½ miles long and 14 miles in circumference. Its area, including that of a few islets off its coast, is 18 square miles.

(2) Surface and Coast

Surface

The island is mountainous and entirely volcanic, rising to several peaks, of which the highest reaches 2,788 ft. These peaks are probably volcanoes, but the interior is unexplored and almost impenetrable, owing to its steep, rugged, and often precipitous nature, the many rushing streams, and the dense vegetation. There are small areas of comparatively level ground surrounding Chatham and Wafer Bays.

There are many considerable streams, the largest being that which enters Wafer Bay, which is reported to flow from a lake in the interior. Another notable stream enters Chatham Bay, and there is a third on the south coast which has a fall of about 1,000 ft. into a bay behind Meule Islet.

The streams flow with undiminished volume throughout the year, and could be made to serve as sources of water-power.

Soil of great fertility occurs everywhere on the island.

Coast

Nearly everywhere steep cliffs make landing impossible, the only three exceptions being Chatham Bay and Wafer Bay in the north and an unnamed bay in the south. Landing is difficult on the whole of the south coast, because of the incessant heavy surf.

The only two harbours are those of Chatham and Wafer Bays, of which Chatham Bay is the better, being sheltered except from the north and north-east. Wafer Bay is larger than Chatham Bay, but is less sheltered, as it opens to the west, and so has a heavy swell during the early months of the year. On the other hand, the slopes surrounding the bay are less abrupt and the area of level land in its neighbourhood is more considerable.

(3) CLIMATE

There are no accurate data concerning the climate of Cocos Island. In general terms it is warm and very humid throughout the year, but the temperatures do not seem to be as high as the latitude would suggest. The island is so small that its temperatures are influenced considerably by the currents that wash its shores.

The winds are light and generally from the south and south-west. Calms are frequent and often accompanied by heavy rainfall. There is no dry season.

(4) SANITARY CONDITIONS

The climate appears to be healthy, and there are no endemic diseases, but in course of time the damp hot atmosphere would prove enervating. No mosquitoes have so far been reported; but were the island inhabited and in frequent relation with the mainland, they would probably be imported, and would certainly thrive.

(5) Population

Cocos Island has never had any permanent population. It was a resort of the buccaneers in the seventeenth century, and later was a watering-place for whalers. About 1897 there was an attempt to colonize the island, but it does not appear to be inhabited now.

(6) Products

Luxuriant tropical forest covers practically the whole island. There are many kinds of hard timber trees, such as are found in Central America, and two species of palms. The coco-nut palm, the prevalence of which gave the island its name, is now rare and scarcely found, except in the interior, but it certainly could be replanted. There are many tree-ferns. Besides timber trees there are a few plants of economic value, such as the guava, papaw, lemon, and pumpkin. Most of these have probably been introduced by settlers at one time or another.

Except for the difficulty of finding level land and keeping down the forest growth, most tropical crops might be cultivated. Certainly a considerable amount of fruit could be grown.

There is little animal life. Wild pigs, descendants of those left by Colnett in 1793, thrive, and rats, also introduced, are numerous. There is one species of snake and a lizard. In the coastal waters there are turtle. Sea-birds are numerous, and there are a few land species, including ducks. In the surrounding seas there are plenty of good edible fish.

II. POLITICAL HISTORY

Chronological Summary

1541–50. First appearance on maps.
1681–7. Visited by buccaneers, and described by Lionel Wafer. Missed, but described, from eye-witnesses' reports, by William Dampier. Often unsuccessfully searched for.
1720. Visit of Clipperton and William Betagh.
1741. Sighted, but not visited, by Commodore Anson.
1791. Sighted and located by Bustamente.
1793. Visited and described by Capt. Colnett.
1795. Visited and described by Capt. Vancouver.
1800–50. Becomes a favourite resort of whalers.
c. 1818–26. Three deposits of plundered treasure concealed.
1838. Visited, and partly surveyed, by Sir Edward Belcher.
1847. Visited by the French ship of war *La Génie.*
1873 onwards. Various unsuccessful attempts to find the concealed treasure.
1888. Gieseler nominated Governor.
1892. Von Bremer's expedition in search of the treasure.
1894. The *Aurora* expedition.
1895. Surveyed and reported on by Capt. R. McC. Passmore for the Costa Rican Government.
1897. H.M. Ships *Impérieuse* and (later) *Amphion* called.
1902. The *Blakeley* search expedition.
1903. The *Lytton* search expedition ; Gieseler quits the island.
1906–7. Lord FitzWilliam's search expedition.
1911–13. Further expeditions for the recovery of the treasure.

A. General History

(1) *First Visits to the Island. Early Maps*

The Isle of Cocos, like the Galápagos group and the rock called Malpelo, was one of the landfalls made at a very early period in the history of Spanish adventure on the Pacific side of America; but the particulars of its discovery, and the identity of the discoverer, are lost to present knowledge. Its existence and approximate situation must have become known, even in Europe, soon after the foundation of Panama and the exploration of Nicaragua, as the island figures on some of the early French maps, where, though the name it still retains is clearly of Spanish origin, it is translated into 'Y^{e} de Coques'. One of these maps (that of Nicolas Desliens) is dated 1541; another (known later as Henri II's Mappemonde) was executed in 1542, and a third (now in the British Museum[1]) was drawn at Arques near Dieppe by Pierre Desceliers, in 1550.

Before the close of the sixteenth century the island seems to have been met with by some other Spanish shipmaster, who perhaps had never heard of it before, or else miscalculated his position; for he bestowed the name *Isla de la Santa Cruz* upon the land he saw, believing it to be a new discovery. Reports of this also reached Europe, and two separate islands are shown on Cornelius Wytfliet's engraved map of *Ivcatana regio et fondura*,[2] published in 1605.[3] One of these is marked 'Ys de Cocos', and the other to the eastward, where no land exists, appears as 'Ys S. Cruz'. In Hondius, map of the following year 'S. Cruz' appears alone, and the same lead was followed by Gerard Mercator in his Atlas Minor of 1607. After this the newer name fell into disuse; and the merely descriptive appellation ‘Isla de Cocos’ has clung to the island in spite of the fact that its groves of palms, through ruthless felling for the sake of the nuts by buccaneers and the crews of whaling vessels, have almost disappeared.

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[1] Add. MSS. 24065.

[2] Yucatan and Honduras.

[3] C. Wytfliet, *Histoire*; ff. 104–5.

In the seventeenth century and later Cocos Island came to be a favourite resort of privateers and filibusters. Its isolated yet accessible situation, the facility with which fresh water of most excellent purity could be shipped, the ease with which sea-fowl could be taken, the abundance of coco-nuts, and the absence of human inhabitants, sufficiently account for its popularity.

Accounts of the visits of sea-rovers have been published, by Wafer,[1] Betagh,[2] and Dampier[3] in particular; several other commanders have recorded unavailing efforts to find the island, with the same object in view, of whom Olivier van Noort[4] in 1600, Joris van Speilberghen[5] in 1615, William Ambrose Cowley[6] in 1684, Raveneau de Lussan[7] in 1687, may be mentioned.

(2) *First Residents*

The first reliable record of any persons having lived on Cocos Island is that by Betagh. He served in Captain Clipperton’s ship, the *Success*; and, when that vessel called there to refresh her crew in 1720, the invalids remained ashore a whole month. Betagh states that ‘the food, ease, and refreshment pretty well recover’d all our company’; so much so, indeed, that three of the white men and eight negroes were, by their own wish, left behind on the island.

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[1] L. Wafer, pp. 379–80.

[2] W. Betagh, pp. 146–7.

[3] W. Dampier, p. 111.

[4] O. van Noort, pp. 31–2.

[5] Hakluyt Society, Series II, vol. xviii, pp. 102–3.

[6] British Museum, Sloane MS. 54.

[7] A. O. Exquemelin, vol. iii, by Lussan, p. 259.

(3) *Anson, Bustamente, Colnett, and Vancouver*

In Christmas week, 1741, H.M. ships *Centurion* and *Gloucester* were detained by light and baffling winds and dull weather for five days in sight of Cocos Island.[1] No attempt was made to land a party on this occasion. Pascoe Thomas, one of the historians of Anson's voyage, remarks of Cocos Island that

> 'it is reported to be very fruitful and pleasant, and to produce Limes, Cacao Nuts, and the like in abundance; as also to abound in Hogs, and good Water, as well as to have convenient Landing'.[2]

Just fifty years after this the Spanish commander Don José de Bustamente, of the sloop *Atrevida*, was detached by Commodore Malaspina to determine the true position of Cocos Island, and first sighted it when he believed himself to be sixty miles away. He cruised off the island for some days, but does not appear to have attempted a landing.[3]

With the decline of buccaneering and contraband trading on the Spanish American coasts, the South Sea whaling and sealing enterprise began to develop; and it was in the interests of certain whaling firms that Captain James Colnett visited Cocos Island in the ship *Rattler* in 1793. His mission was to prospect and report upon the best methods for extending the whaling industry, and the Board of Admiralty (who lent valuable assistance) recommended that he should not pursue his researches in the Pacific Ocean farther northward than Cocos Island.[4]

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[1] R. Walter, pp. 224–5.

[2] P. Thomas, p. 103.

[3] Malaspina, pp. 120–1.

[4] Owing to the exclusion by the Spanish Government of foreign vessels from its ports in America, a memorial was presented to the Board of Trade by London merchants concerned in the South Sea fisheries, representing the importance of discovering such harbours

Captain Colnett's description of the island is full and picturesque. He was much impressed by its natural fertility and charm. He characterizes it as

> 'Otaheite on a small scale, but without the advantage of its climate, or the hospitality of its natives'.

Unlike other navigators, Colnett considered Wafer Bay a better anchorage than North or Chatham Bay, though only for ships of less than 200 tons. He left a pair of goats ashore, as well as a boar and a sow, which afterwards multiplied; he also planted fruit and vegetable seeds.[1]

Colnett's exploration was followed by Captain George Vancouver's, while commanding H.M. ships *Discovery* and *Chatham*, in 1795. This officer was less favourably impressed with the island than Colnett had been.[2] To arrive at a true estimate of its natural resources (so far as its coast and anchorages are concerned) the accounts of both these writers should be read. But neither of them explored the interior, which is very broken and rugged and everywhere covered with dense forest or bush. Vancouver examined both roadsteads, and the *Discovery's* master, Mr. Whidbey, gave preference to Chatham Bay.[3]

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as might provide South Sea whalers voyaging round Cape Horn with opportunities of refreshment and security for refitting. This memorial set forth the liability of the crews of these ships to scurvy and other misfortunes, and emphasized the need for intermediate ports of call. In response to this memorial the sloop *Rattler* was purchased from the Lords Commissioners of the Admiralty by Messrs. Enderby & Sons, the leading firm of those engaged in the whaling and sealing trade. Capt. Colnett, R.N., was placed in command, with particular instructions for conducting the desired investigation. *Cf.* Colnett, pp. viii, ix.

[1] Colnett, J., pp. 66–74.

[2] Colnett and Vancouver had been shipmates under Captain Cook in H.M.S. *Resolution*, during 1772–75, the first as a midshipman and the other as an able seaman.

[3] Vancouver, G., vol. iii, pp. 362–76.

Ships of the British and North American whale fishery now began to make Cocos Island a place of call; and sundry stray references indicate that from the close of the eighteenth to the middle of the nineteenth century (i.e. so long as whaling in those seas was a profitable enterprise) their visits were fairly frequent and their crews found in the island the relief they wanted.

(4) *Deposits of Treasure*

Except for this patronage by whalers, the island seems to have lapsed, after the visits of Colnett and Vancouver, into one of its recurrent periods of oblivion. Advantage was taken of this, in 1818 or 1819, by a notorious pirate known as Benito, *alias* Bennett Graham, to secrete there a vast plunder he had obtained by rifling certain churches in Peru. A few years afterwards, it is said, Benito deposited a fresh quantity of gold bars and specie, worth eleven million dollars. In or about 1826 a man passing as William Thompson, who appears to have previously served under Benito, but was then in command of the brig *Mary Read*, concealed about twelve million dollars' worth of stolen gold coin, jewels, and silver ingots on Cocos Island.

Some of the circumstances of the three lodgements of treasure at the island, and of efforts that have been made for its recovery, are related (by persons who were more or less concerned in the matter) in documents preserved at the Admiralty. An attempt to piece the facts together in the form of a narrative is embodied in a book called *On the Track of a Treasure*, by Mr. Hervey de Montmorency.[1] Another book, by Mr. Ralph D. Paine,[2] contains a chapter on the subject under the heading ‘The Lure of Cocos Island’, much of which is culled from the former book. Both these books are of the sketchy or ‘popular’ order, and the narratives they present cannot be accepted without reserve, nor can they be regarded as complete, because many of the true details of the story have never transpired. Certain names of persons, and of at least one ship, have also been transfigured; but any one with a knowledge of the facts will find little difficulty in recognizing the pseudonyms adopted.

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[1] Montmorency, H. de, *passim*.

[2] Paine, R. D., *The Book of Buried Treasure*, p. 279, &c.

(5) *Attempts to recover Treasure*

Not less than a dozen organized attempts to recover the buried treasure have been made. Clues to the spot where one batch of treasure was deposited have led some of the searchers to a marked rock; and one man is said to have come upon some gold bars and kegs of Spanish coin through an accidental fall over the face of a scarp. A silver ecclesiastical cross was also found in the bed of a stream. But the main stores of treasure are still hidden, in spite of various excavations and blasting operations which have been undertaken from time to time.

In 1841 the brig *Edgcombe* proceeded to Cocos Island, from Newfoundland, with certain mariners named Boig, Keating, and Gault, whose design was to recover the treasure. Two deserters from an American whaler were living there then—perhaps of the same party which Belcher found.[1] A further visit in search of the treasure was paid to the island a year or two later by the schooner *Gauntlet*, of Newfoundland.

There is a record in the Foreign Office to the effect that

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[1] *Infra*, p. 22.

'A treasure search expedition was organized by a syndicate formed by Lord FitzWilliam, under a concession held by Mr. Gissler (or Gieseler), who lived on the island for many years. At the same time the Costa Rican Government granted a similar concession to a Mr. T. Robinson. The Costa Rican Government professed at first to regard Lord FitzWilliam's expedition as a filibustering one; but ultimately the FitzWilliam and Robinson parties came to an agreement and joined forces in an attempt to discover the treasure, which was not successful'.

Another search expedition was carried out in 1912 by Miss L. Brocklesby Davis and Mrs. Barre Tile (or Till ?), under a two years' concession granted by the Costa Rican Government. The ultimate object of this undertaking was to devote the proceeds to philanthropic work in London; but the ladies met with no success. Some further, but not very clear, account of this and other expeditions for the recovery of this treasure were published in the issues of *The Times* quoted below.[1]

(6) *Visit of Belcher*

The results obtained by previous explorers were revised by Captain Sir Edward Belcher, commanding H.M.S. *Sulphur*, with the *Starling* in company, in 1838; it is mainly from the survey made by officers of those ships that the northern and western coast-line, including Chatham and Wafer Bays, has been laid down on the modern Admiralty chart of Cocos Island.[2] Belcher refutes Vancouver's depreciatory remarks, which, he tells us, he read 'not without surprise'. 'The thicket', he says, 'is not now impenetrable,' for the men belonging to a whale-ship that was then at anchor passed across the ridge (which is 700 feet high) from Chatham

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[1] *The Times* South American Supplement of June 27, 1911, pp. 8–9; *Ibid.*, May 27, 1913, p. 8; *The Times*, July 13, 1912, p. 8.

[2] Plan No. 1936.

Bay to Wafer Bay; and some of the bluejackets reported that they had reached a lake, or large sheet of water, in the interior. Pigs and goats were then plentiful. The whaler's men managed to catch plenty of fish. Several seamen were living on the island at the time of the *Sulphur*'s visit, and they had built a hut. One was an Englishman, another a Portuguese, and five were coloured men. They had been landed from a whaler by their own demand, and subsisted on fish, wild pigs, sea-fowl, &c. Only one of them was then induced to come away; but when the *Sulphur* revisited the place a year later three of the others had gone off in another whaler, and two of the latter's crew, being corrupted by those remaining, had deserted and taken their places on shore. A whale-ship was then at anchor, and her men had gathered fifty pumpkins from the vines planted by the *Sulphur's* people twelve months before.[1]

(7) *Visits of French Men-of-War*

In 1847 the French frigate *La Génie* called, and added her record to Colnett's and Vancouver's, cut on a boulder at Chatham Bay. In 1889 the French cruiser *Duquesne*, and in 1891 the *Dubourdieu*, touched at Cocos Island. It was probably as an officer of this last ship that M. Lièvre[2] visited the island. His description of it is one of the best.

(8) *Visit of Agassiz*

The late Alexander Agassiz called at Cocos Island in the U.S. Fish Commission steamer *Albatross* in March 1891, during one of his many cruises undertaken purely for scientific research. An outline of his observations is published in the *Bulletin of the Harvard Museum of Comparative Zoology*, vol. xxiii;[1] but it contributes nothing to the history of the place.

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[1] Belcher, E., vol. i, p. 189.

[2] Lièvre, p. 357.

B. Ownership

With regard to the nationality of Cocos Island no clear statement has been met with dating earlier than 1888, in which year, according to Mr. de Montmorency, the German (or, according to *The Times* supplement,[2] Swiss) settler Gieseler, or Geisler, was granted a concession in the island by the Costa Rican Government, with a nomination as governor—a post which had never previously been created there, as the island was uninhabited. Gieseler, who with his wife and one native labourer from the continent then formed the entire population of the island, finally quitted it in the steamer *Lytton* (late *Scotia*) with the Montmorency expedition in 1903; and in 1911 he was living at Punta Arenas (Costa Rica).[3]

It was Gieseler's homestead that was seen in 1897 in Wafer Bay, and reported by the officer commanding H.M.S. *Icarus*,[4] Comdr. E. J. Fleet, as 'a small settlement of four or five huts, where the Costa Rica colours were flying'.

An examination of Don Manuel M. de Peralta's *Aperçu critique*,[5] submitted to the President of the French Republic as arbitrator on the boundary question between Costa Rica and Colombia in 1900, reveals no mention whatever of Cocos Island, nor of any Costa Rican territorial claim to seaward of Coiba Island.

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[1] Agassiz, A., pp. 1–85.

[2] See note 1, col. 7.

[3] *The Times* South American Supplement, 1911.

[4] His report was transmitted through the naval Commander-in-Chief on the station, whose flagship was H.M.S. *Impérieuse*.

[5] Peralta, *passim*.

In the excellent descriptive account (which includes some historical notice of the island) by Assistant Paymaster D. Lièvre, of the French navy, this officer ignores the existence of any sovereign rights over it and discusses the possible advantages France might derive by taking possession of it. M. Lièvre's articles were published in 1893.[1] Incidentally, he mentions that Clipperton Island,[2] the nearest land to Cocos Island, on the west-north-west, did at that time belong to France. There appear to have been guano, or phosphate, workings on it in 1894, in the hands of the Oceanic Phosphate Lime Co., of San Francisco; but in 1896–7 the proprietors, owing to inadequate capital and working difficulties, desired to sell all their interest there, including their title to the island. Their agents stated that the French Government had waived its claim to the island, and negotiations for taking it over were pending with the Pacific Islands Co., Ltd., a wealthy and well-known phosphate-getting concern, mainly British, but in which the German Emperor was a large private shareholder. There are no phosphatic deposits on Cocos Island, whose physical features are radically different from those of Clipperton Island.

It was stated by the late Colonel Church, in an article contributed by him to the *Geographical Journal* in 1897,[3] that 'Cocos Island is a possession of Costa Rica', and that 'Captain R. McC. Passmore, an English ex-naval officer in the employ of Costa Rica, had been engaged in surveying Cocos Island in 1895, and reported upon his work to the Government of that Republic'.

Colonel Church was a distinguished and trustworthy traveller and engineer who was long in Costa Rica and

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[1] *Revue de Géographie*, xxxii, xxxiii, 1893.

[2] In lat. 10° 17′ N., long. 109° 13′ W. of Greenwich.

[3] *Geographical Journal*, July 1897. Vol. x, p. 73.

Bolivia.[1] He mentions, in the same article, apparently on Captain Passmore's authority, that there were

> 'ten colonists (at Cocos Island) in 1894, part of the emigrants sent there under a contract with the Costa Rica Government to establish an agricultural colony. It was, however, suspected that the real object of the *empresario* was to hunt for immense treasures in gold bars said to have been buried in three separate parcels in as many localities by the pirate Benito ; or, according to another story, by the captain of an English brig, to whom the treasure was entrusted in Peru during the War of Independence.' [2]

The existence of treasure concealed in the island is well established, and has been a matter of notoriety among residents not only of Costa Rica but of all the principal coast towns from Lima to Vancouver for many years. The principal interest hitherto aroused regarding Cocos Island centres in this fact.

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[1] For a biographical notice of Colonel Church see the *Geographical Journal*, vol. xxxv, of 1910, pp. 203, 206.

[2] *Loc. cit.* The captain of the brig was the 'William Thompson' mentioned in § 4. *Cf.* Montmorency, H. de, *On the Track of a Treasure.*

III. GENERAL OBSERVATIONS

In so far as its known history points, the administration of Cocos Island by the Government of Costa Rica dates from 1888 (cf. above, p. 23). Prior to the year 1821 the State of Costa Rica was a Spanish possession from the beginning of the sixteenth century. At that time, and for 300 years afterwards, the Spanish monarchs and people believed in the temporal efficacy of the Papal Bull of Alexander VI, as amended by the Treaty of Tordesillas in 1494, and claimed sovereign rights over all the islands to the westward of the American continent, as far as a meridian passing through the East Indies. It was on this basis that Viceroys of Peru despatched expeditions of discovery into the Pacific Ocean, of which Mendaña's to the Solomon Islands, Queiros's in search of a southern continent, Gonzalez's to Easter Island, and Boenechea's to Tahiti (places much more remote from the continent than Cocos Island is) afford examples. Hence, when in 1821 Costa Rica declared itself independent of the mother country, its rulers would, in the ordinary course, view Cocos Island, which is only 260 miles distant, as an appurtenance, if not an integral part, of the *terrain* of the new republic. Geographically considered, such a claim must be conceded; and there is little doubt that popular opinion and national sentiment in Costa Rica would oppose any suggestion to the contrary. Moreover, some thirty years have passed, without challenge, since the Ministry appointed Gieseler their governor in the island; and it is a principle of international law that *Qui prior est tempore potior est jure.* In other words, Costa Rica is daily acquiring a prescriptive ownership by priority of occupation.

APPENDIX

Writing of 1684, William Dampier, who was then serving in the *Batchelor's Delight*, under Capt. John Cook, describes from hearsay Cocos Island (which they failed to find) as

'so named by the Spaniards, because there are abundance of Coco-nut Trees growing on it. They are not only in one or two Places, but grow in great Groves, all round the Island, by the Sea. This is an uninhabited Island, it is 7 or 8 Leagues round, and pretty high in the middle, where it is destitute of Trees, but looks very green and pleasant, with an herb called by the Spaniards *gramadael.*[1] It is low Land by the Sea-side. This Island is in 5d. 15m. North of the Equator; it is environed with Rocks, which makes it almost inaccessible: only at the N.E. End there is a small Harbour where Ships may safely enter and ride secure. In this Harbour there is a fine Brook of fresh Water running into the Sea. This is the Account that the Spaniards give of it, and I had the same also from Capt. Eaton, who was there afterward.' (*A New Voyage round the World.* By Capt. William Dampier (p. 111). London, 1729.)

Lionel Wafer, who was in the same ship and visited Cocos Island in 1685, gives a better account, from his own observation, viz.:

'We . . . came to the Island Cocos, in 5 Deg. 15 Min. N. Lat. 'Tis so called from its Coco-Nuts, wherewith 'tis plentifully stor'd. 'Tis but a small Island, yet a very pleasant one: For the Middle of the Island is a steep Hill, surrounded all about with a Plain, declining to the Sea. This Plain, and particularly the Valley where you go ashore, is thick set with Coco-Nut Trees, which flourish here very finely, it being a rich and fruitful Soil. They also grow on the skirts of the hilly ground in the Middle of the Isle, and scattering in Spots upon the Sides of it, very pleasantly. But that which contributes most to the Pleasure of the Place is, that a great many Springs of clear and sweet Water rising to the Top of the Hill, are there gathered as in a deep large Bason or Pond, the Top subsiding inwards quite round; and the Water having by this means no Channel whereby to flow along, as in a Brook or River, it overflows the Verge of its Bason in several Places, and runs trickling down in many pretty streams. In some Places of its overflowing, the rocky Sides of the Hill being more than perpendicular, and hanging over the Plain beneath, the Water pours down in a Cataract, as out of a bucket, so as to leave a Space dry under the Spout, and form a kind of Arch of Water; which together with the Advantage of the Prospect, the near adjoining Coco-nut Trees, and the Freshness which the falling Water gives the Air in this hot Climate, makes it a very charming Place, and delightful to several of the Senses at once.

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[1] Couch grass (*Triticum repens*).

'Our men were very much pleas'd with the Entertainment this Island afforded them: And they also fill'd here all their Water-Casks; for here is excellent fresh Water in the Rivulet which those little Cataracts form below in the Plain, and the Ship lay just at its Outlet into the Sea, where there was very good Riding. So that 'tis as commodious a Watering-place as any I have met with. Nor did we spare the Coco-nuts, eating what we would and drinking the Milk, and carrying several Hundreds of them on board.' (See pp. 379–80, in vol. iii of *A Collection of Voyages*, published by James and John Knapton; London, 1729.)

William Betagh quotes from the journal of George Taylor, mate of Capt. Clipperton's ship the *Success*, 18 Dec. 1720.

'Here all our people . . . got ashore, where we build a house for the sick men. Here is abundance of good fish round the island which we take pains to catch, the surf being sometimes very great. Our people find here plenty of coco-nuts, crabs, boobies and their eggs, this being their hatching time. . . . This food, ease, and refreshment pretty well recover'd all our company. We wood and water though with much difficulty; for here is a great swell coming in from the northward constantly at full moon and change. . . . Eight *nigros* and three of our men desert here, and abscond in the woods: Higgins, Caulker, and Shingle. . . . After continuing here a month we weigh and set sail, January 20th, latitude 05: 38 N.' (*A Voyage round the World.* By William Betagh (pp. 146–7). London, 1728.)

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EASTER ISLAND

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) POSITION AND AREA

EASTER ISLAND, or Rapa Nui, is situated in the eastern Pacific Ocean, about 2,100 miles west of Coquimbo on the coast of Chile. The position of the settlement at Cook Bay on the west coast is 27° 10′ south latitude and 109° 26′ west longitude. It is a Chilean possession. The nearest island is the barren rock of Sala y Gomez, about east by north, 210 miles distant. Easter Island lies 2,200 miles from Tahiti, and about 420 miles south-east of the great circle route from Panama to Wellington, New Zealand.

The circumference of the island is about 29 miles, and its area about 40 square miles.

The British and American charts differ considerably in detail. Of the two the American is the later. The Chilean chart appears to be mainly a copy of the British.

Table of Approximate Distances

Distances from Easter Island:

	Miles.
Western end of Magellan Straits	2,400
Port Stanley Wireless Telegraph Station	3,000
Valparaiso	2,040
Callao	1,920
Panama Canal	2,820
New Zealand	4,000
Honolulu	3,900
Pitcairn Island (nearest British possession)	1,800

(2) SURFACE AND COAST

The island, which is roughly triangular in shape, is an elevated plateau, from the general level of which a number of hills arise, the highest points being at or near the angles. The highest summit is Rana Hana Hana (1,767 ft.) in the north-west corner. In the south-west Rana Kao reaches 1,327 ft., and in the east Puakatiki rises to about 1,000 ft.

The whole island is of volcanic formation, and the peaks are extinct or dormant volcanoes. Several of them have well-formed craters and two or three have crater lakes. There is no historic record of eruption, nor has any earthquake been known.

Disintegrating lava forms the surface everywhere, and in addition to the large volcanoes there are numerous small cones of volcanic ash. In the north-east there is a good deal of drifting sand, which renders walking difficult and riding tedious.

Nearly all the coasts are cliff-bound. At the south-western and eastern angles the cliffs rise to about 1,000 ft. Elsewhere they are lower, varying from 50 to 100 ft. Off the south-west angle are three islets, the largest of which is Motu Nui, and there are smaller rocks near some of the headlands, but otherwise the coasts are reported to be clear.

There are no streams.

(3) CLIMATE

Easter Island lies in the trade wind region, and has a fairly uniform climate throughout the year. The warmest season is from January to March, with a mean temperature of about 74° F. (23° C.), and the coolest season from June to October, with a mean of about 65° F. (18° C.). Temperatures of over 80° F. (27° C.)

and under 50° F. (10° C.) are rare. Bright sunshine is usual.

The trade wind (east to south-east) prevails at all seasons, but northerly winds sometimes occur, chiefly from June to November. Southerly and westerly winds are less common. The trade wind blows strongly in the daytime and slackens towards evening. Gales are infrequent and thunderstorms rare.

Rain falls in all months, chiefly in showers or drizzle; on the higher ground there are probably heavier falls. The total rainfall for the year is variable, but seems to be about 50 in. (1·27 m.), which is barely sufficient to make the island productive. Dew is regular and heavy. Mists often occur in summer.

(4) SANITARY CONDITIONS

The climate is healthy, and the population used to enjoy great freedom from sickness. Latterly, however, tuberculosis has been introduced and become common. Flies are a plague, and mosquitoes breed in the crater lakes, but neither insect seems to bear disease.

The water-supply is poor. Despite the rainfall there is no running water on account of the absorbent nature of the rocks. Near the settlement of Hanga Roa there is a spring of good water, which is said never to fail. There are several other wells which have an intermittent supply. Among the ancient remains for which the island is famous there is evidence of structures erected for the storage of water.

(5) RACE AND POPULATION

The natives, who are Polynesian with some Melanesian admixture, number about 250. This is probably only one-tenth of the total living on the island when it was discovered. The decrease is due to the removal natives on several occasions and to exotic diseases. In 1863 about 900 were kidnapped by Peruvians for the Chincha Island guano diggings. In 1871 the French missionaries, who found themselves at divergence with the firm of Brander, then in control of the island, left for Mangareva, in the Gambier Islands, with 300 natives. In the same year the firm of Brander employed about 500 on their plantations at Tahiti.

The population is confined to the western side, where the only villages, Hanga Roa and Mataveri, are situated. The only white inhabitant is the manager of the Chilean company which uses the island as a cattle-ranch and employs native labourers.

Most of the natives profess Christianity, but there are now no missionaries on the island. The language is Polynesian.

The problem of the origin of the huge carved images on Easter Island is still unsolved.

II. POLITICAL HISTORY

CHRONOLOGICAL SUMMARY

1722. Discovery by the Dutch.
1770. Re-discovery by the Spaniards, and annexation to Spain by order of the Viceroy of Peru.
1774. Visit and exploration by Captain Cook.
1786. Visit and exploration by La Pérouse.
1804, 1816. Visits by Lisiansky and Kotzebue (Russians).
1805. Natives kidnapped by American sealers.
1825. H.M.S. *Blossom's* boat's crew stoned by natives.
1830. Visit by H.M.S. *Seringapatam.*
1852. Call by H.M.S. *Portland.*
1862. Visit by French gunboat *Cassini.*
1862–63. Slave-raids by Peruvians.
1863. Small-pox introduced by the repatriated slaves.
1864. First missionary (Eugène Eyraud) landed.
1866. Mission reinforced. Dutrou-Bornier, associated in business with Mr. Brander, settles on the island.
1868. Island visited by H.M.S. *Topaze.*
1870. Island visited by French cruiser *Flore,* H.M.S. *Chanticleer,* and the Chilean training-ship *O'Higgins.* Chile reported to have taken possession.
1870. Bornier quarrels with the missionaries.
1871. Mission evacuates Easter Island. Messrs. Bornier and Brander claim the lands throughout the island, and introduce sheep and cattle.
1875. The *O'Higgins* revisits Easter Island.
1876. Bornier killed by natives.
1877. Visit of French cruiser *Seignelay.* Death of Mr. Brander, senior, at Tahiti.
1882. Visits of H.M.S. *Sappho* and German gunboat *Hyäne.*
1884 (*circa*). Lands at Hanga Roa acquired by the Chilean Government from the Roman Catholic mission.
1884. Visit of H.M.S. *Constance.*
1888. Visit of Chilean cruiser *Angamos.* Chilean flag hoisted.

1888. Visit of the United States corvette *Mohican*.

1889. French mission hands over property to Archbishop of Santiago.

1895. Lands at Hanga Roa leased by the Chilean Government to the Compañía Esplotadora de la Isla de Pascua. Visit of British training squadron under Commodore Atkinson. Rights in the island acquired by Señor Merlet.

1900. Visit by Chilean corvette *Jeneral Baquedano*.

1903. Merlet's rights transferred to Compañía Esplotadora.

1904. Visit by U.S. Government steamer *Albatross* with Professor Agassiz's expedition, and also by the *Jeneral Baquedano*.

1906. Visit of H.M. ships *Cambrian* and *Flora*.

1909. Same ships revisit Easter Island.

1914–15. Explorations by Mr. and Mrs. Scoresby Routledge. German cruisers *Gneisenau* and *Scharnhorst* put in, and set up a look-out and signal station.

1915. Visit of Chilean training-ship *Jeneral Baquedano*.

1917–18. Part of crew of wrecked German armed cruiser *Seeadler* take refuge on the island.

(1) EARLY HISTORY

THIS island, known to its natives as Rapa Nui, was discovered in 1722 by the Hollander Jacob Roggeveen, while conducting a search for the supposed Southern Continent reported by Edward Davis (in 1687) to have been sighted in the same latitude.

It was independently discovered again in 1770 by Don Felipe González, of the Spanish Navy, when engaged in a similar quest; and this officer, acting under instructions from the Viceroy of Peru, formally annexed the island to the Crown of Spain, and erected three crosses on it in token thereof. A Declaration of Possession [1] was drawn up in writing and attested by the Paymaster on November 20, 1770.

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[1] The official copy of this document, attached to Capt. González' report, is preserved in the *Archivo de Indias* at Seville (see Appendix, p. 56).

Rapa Nui was next visited by Capt. Cook and his officers, with the Forsters (father and son), in H.M.S. *Resolution*, in 1774. They were followed by de la Pérouse and de Langle in 1786, Amasa Delano (American) in 1802, Capt. Urey Lisiansky (Russian) in 1804, Lieut. Otto von Kotzebue (Russian) in 1816, and Capt. F. W. Beechey of H.M.S. *Blossom* in 1825. Personal intercourse with the natives revealed them as a bold, uncouth, and importunate people, extraordinarily primitive in social, domestic, and quasi-religious affairs, and daring thieves.

Meanwhile, the whaling industry was being developed in the Pacific; and ships engaged in it put in, from time to time, at the island for fresh provisions. In 1805 the brig *Nancy*, of New London, kidnapped twelve men and ten women of the island to work in a sealing gang at Más-á-fuera; and several others, who resisted capture, were shot. It is said that this outrage was repeated; and, in consequence of it and other malpractices on the part of whaling crews,[1] the natives adopted a hostile attitude towards all visitors, and pelted several boats' crews with stones.

(2) MISSIONS AND VISITS OF SHIPS

H.M.S. *Seringapatam*, Captain the Hon. William Waldegrave, called at the island in 1830; and Rear-Admiral Moresby, in H.M.S. *Portland*, communicated with the natives in 1852, but without anchoring. Little more was heard of Easter Island until 1862, when Lieut. Lejeune, commanding the French gun-vessel *Cassini*, called there and found the natives friendly, but impudent thieves. His account of their untutored savagery and abandoned condition moved Père Montiton, a French missionary from the Tuamotu atolls, who was then resting at Valparaiso, to offer himself as a pioneer missionary among the Easter Islanders; and, after some alterations of plan, a mission was instituted by the Congrégation du Sacré-Cœur, in the execution of which, under conditions of great wretchedness and no small peril to life, the names of Frère Eugène Eyraud and Père Hippolyte Roussel stand pre-eminent. Eyraud first landed at Easter Island on January 4, 1864, and remained there nine months, without any European companion.

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[1] Kotzebue, i. 133; Moerenhout, ii. 278.

A little before this time, the employment of Chinese coolies in the guano diggings at the Chincha Islands (near Callao) not yielding the results expected, several Peruvian vessels put to sea and visited certain Pacific islands, where their crews committed flagrant slave-raids in quest of labourers to replace the Chinese. These marauders made more than one descent upon Easter Island in the years 1862–3, and succeeded in carrying off, by stratagem combined with violence and murder, several hundreds of the natives, including the principal Chief, Maurata, and other men of influence. Some of the acts of the slavers, being committed on islands within the French Protectorate, were reported to the authorities at Tahiti; and, on the representations of French officials, the Peruvian Government intervened to put an end to the traffic and, in 1863, ordered the return of the forced labourers to their homes. By that time, however, the majority of them, including Maurata, had died; and, when the remnant of the victims—just one hundred in number—were embarked about the middle of that year, they carried small-pox with them. Only fifteen individuals survived to reach their native soil, and these infected the inhabitants left behind. In consequence of these events, no more than 1,200 persons, out of a population which the best authorities compute to have once numbered 3,000, remained alive when Frère Eugène arrived; and the epidemic was still raging.[1] In October 1864 Frère Eugène returned to Tahiti to recuperate; but while there he fell ill of pulmonary tuberculosis. In spite of failing health he volunteered to resume his mission and, accompanied by Père Roussel, went back to Easter Island, where, however, he died on August 20, 1868, a few hours after seeing the last of the heathen natives converted to the Christian faith.[2] Shortly after this, deaths from phthisis became very numerous; and the population declined rapidly from this cause and from a high rate of infant mortality.

The mission was reinforced in 1866. About the same time, a French sea-captain, Dutrou-Bornier by name, settled on the island, and soon afterwards became associated in business with a prominent firm in Tahiti, known as the Maison Brander, whose principals formed a scheme to acquire land at Rapa Nui and exploit the island as a sheep-run and cattle-station.[3] The advent of Bornier changed the destiny of the islanders. He proved to be violent and unscrupulous. Disputes arose between him and the missionaries, who, after many rebuffs, had made material progress in their work. These dissensions gave rise to factions among the natives, which ripened into an attitude of open defiance between the adherents of the mission on the one side and Bornier's supporters on the other. Acts of pillage, incendiarism, and personal violence ensued; it is stated that three or four persons were killed, that Bornier himself discharged a rifle at Père Roussel, that the cemetery was profaned and Frère Eugène's tomb wrecked, in July 1870.[4] When H.M.S.

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[1] *Nautical Magazine*; Powell; Caillot; *Annales*.

[2] *Missions Catholiques*, ii. 39. When, twenty years later, Père Montiton visited the Island, he found that the natives had reverted to paganism (Ibid. xxvi. 195).

[2] Ibid. vi. 382.

[4] Ibid. 384–5.

Chanticleer touched at Rapa Nui four months after these events, the islanders were still divided, and had had several fights. Commander Bridges thought that they were 'dying off with rapidity'; he added that 'consumption is said to be the cause'.

On the state of anarchy becoming known to the French bishop at Tahiti, he appealed to Mr. Brander to take steps to restore order; and that gentleman went to the island himself. Peace was only secured by the withdrawal of the mission, with some 300 of its adherents, to the Gambier Islands, and the removal of about 500 more, who, finding life no longer tolerable at home, consented to work for terms of three and five years on Mr. Brander's plantations at Tahiti, where a large number of them speedily died. Only 175 were left at Rapa Nui with Bornier, many of them against their will; and these soon dwindled, by disease and emigration, to 100.[1]

(3) Relations with Chile

In 1870 the Chilean corvette *O'Higgins,* Capt. Goñi, proceeded to Easter Island and was thought to have annexed it on behalf of the Government of that Republic;[2] but the Congress paper containing the commander's report affords no ground for believing that such was the case.[3] It was stated in 1895 and 1899 that 'this island is now used as a Chilean penitentiary',[4] and Petermann says that, when possession was definitely taken in 1888, it was with that object in view.[5]

[1] *Missions Catholiques*, vi. 385–6.

[2] On the visit in 1870, see Appendix ii, p. 57.

[3] *Memoria,* 83 *et seq.*

[4] *Longmans' Gazetteer,* 1895; '*The Times' Gazetteer,* 1899.

[5] *Petermanns Mitteilungen,* 1888, p. 374: 'Endlich hat sich die chilenische Regierung im Juli der durch ihre eigenartigen Skulpturen berühmten Oster-Insel bemächtigt, um hierbei eine Strafkolonie zu verlegen.'

Whatever intention the Chilean authorities may at one time have had, it is certain that effect was never given to any views of the latter kind.

M. Caillot states, in his *Histoire de la Polinésie orientale* (page 485):

> 'En 1872 la reine[1] de Rapa-nui avait adressé à Tahiti une demande de Protectorat; et, en 1881, un chef et une vingtaine d'indigènes étaient venus à Papeete pour demander la nomination d'un résident. Le gouvernement français avait remercié la souveraine et donné l'espoir d'une prochaine annexion, puis répondu au chef et aux indigènes qu'il les considérait comme ses protégés, mais qu'il ne disposait pas d'assez de fonds pour placer dans leur île un fonctionnaire en permanence.'

The *O'Higgins* revisited Easter Island in March 1875, when Capt. López found the population to consist of 70 men, 25 women, about 100 children, and Bornier, besides a Danish carpenter and his wife (a Chileña). Madame Bornier was then the 'reina' or autocrat of the place, and partitioned the land as she chose. The stock consisted of 4,000 sheep, 70 head of cattle, 20 ponies, and 300 swine, all thriving well. Fowls and rabbits ran semi-wild.[2]

When the French cruiser *Seignelay* touched at Easter Island in 1877, Bornier was dead. He had been killed by the natives some months before, although he was married to their chiefess and had had two daughters by her; but the natives asserted that he had died after a fall from his horse.[3] The fact that he was murdered was afterwards established, and is recorded by Fleet-Surgeon Hay, who was at the island in H.M.S. *Constance*, in March 1884, and it is not now disputed.

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[1] This was the native woman whom Bornier married.

[2] *Anuario de la Marina de Chile*, 1876.

[3] Pinart. M. Caillot quotes August 1876 as the date of Bornier's death.

At this date the resident agent for Mr. Brander was August Länder, a German, who succeeded Mr. Alexander Salmon in that capacity a year or so after H.M.S. *Sappho's* visit in 1882. Länder flew the British red ensign, as Salmon had done before him. He reported that Mr. Brander (senior) had died at Tahiti in 1877, and that his widow, a Tahitian princess, had married a Mr. Darsie, between whom and the French bishop a lawsuit was pending in respect of land in Easter Island sold by the mission to Brander but not paid for. The Darsies were said to be willing, however, to sell all their interest in the island; and it was probable that a fresh firm would be formed 'to own and work it '.[1] There were at that time 12,000 sheep, more than 1,000 cattle, and a few horses on the estate; and the export of wool amounted to 25 or 30 tons in the year. Hides and salted beef were also shipped away; the pigs and goats had all been killed off. The population numbered 160, and observed no kind of religious worship.

(4) ANNEXATION BY CHILE

About 1883 Easter Island had begun to attract notice as a possible place for a coaling station for merchant steamers that might be expected to use the projected route to or from Australasia by the Panama Canal. In July 1888 the Chilean cruiser *Angamos* visited Easter Island; and her commander, Señor Toro, hoisted the flag of that Republic on shore. The British consul at Tahiti, Captain Talbot, was informed that the Chilean Government had purchased property there, with a view, it was said, to colonization; and that a brother of Commander Toro had been appointed its first Governor.[1]

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[1] Admiralty records. Mr. Brander, senior, who founded the 'Maison Brandère' at Tahiti, died there shortly before the *Seignelay's* visit, in 1877. His widow was Titaua Marama, daughter of the high Chiefess Ari'i-ochau by her English husband Mr. Salmon, of London. The marriage of Mrs. Brander to Mr. George Darsie took place in 1878; and, after parting with their interest in Easter Island, they retired to Scotland in 1892, where Titaua (Mrs. Darsie) died, at Anstruther, in 1898, Mr. Darsie surviving her 20 years.

More light was thrown on the action taken by the Chilean Government in a communication to the Foreign Office from Consul Simons (at Tahiti) showing that in 1888, during Señor Balmaceda's Government, Chile purchased through Commander Toro certain lands and rights on the island which were then in the possession of the French Catholic Mission at Tahiti; the flag of the Chilean Republic being hoisted by Commander Toro at the end of July 1888. At this time Mr. John Brander,[2] a British subject born and resident in Tahiti, was in practical possession of a great portion of Easter Island. His offer to sell his rights to the Chilean Government for £4,000 was accepted by Señor Balmaceda without the sanction of Congress.

As a consequence of the Chilean occupation affirmed by Commander Toro, the French mission, with the concurrence of the Pope, handed over its charge and its properties on Easter Island to the Archbishop of Santiago; but this arrangement produced no beneficial results for the islanders. And, when Père Georges Eich, of the French *Congrégation*, chanced to call there some years later, he considered that the natives were exposed to harsh treatment, and lived under an oppressive regime.[3] The Chilean Governor was Don Alberto Sánchez, who also acted as agent for the lessees, a trading firm at Valparaiso holding the usufruct for twenty years. Sánchez was thus the autocrat of the island, and maintained his authority, both as a Government official and as private manager of the ranch, with the aid of three constables (Chileans). On the overthrow of the Balmaceda Government, Congress not only refused to recognize the arrangement with Mr. Brander but apparently abandoned the control of Easter Island; for Commander Toro wrote in 1895 that his Government had ‘abandoned it to its own lot’ and had withdrawn its representative.

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[1] Foreign Office records; Caillot, pp. 485–6.

[2] Not to be confused with his father, Mr. John Brander, senior, whose death took place in 1877.

[3] *Annales,* lxx. 379–80.

(5) RECENT HISTORY

In May 1900 the Chilean corvette *Jeneral Baquedano* called at the island; in March 1903 the late Earl of Crawford paid a visit in his yacht the *Valhalla* and remained several days; and the *Jeneral Baquedano* again called in December 1904, being then near the termination of a voyage round the world, under Captain Luis Gómez. The late Alexander Agassiz arrived at the same time in the Fish Commission's steamer *Albatross*, which had been placed at his disposal by the United States Government for conducting oceanographic investigations. The Professor, assisted by his scientific staff, made a physical examination of the island and surrounding sea-bottom.

When H.M. ships *Cambrian* and *Flora* called in 1909, Capt. Nugent found that

> ‘the Chilean Governor, Mr. Amer [*sic*], who was also the manager of the cattle ranch, had gone away in a passing ship about ten months before, and had left a Chilean half-caste (native of the island) in charge’.

The only European then on the island was an old French sailor, named Pont, who had lived there a quarter of a century. He stated that there had been no communications with the outer world for two years past, and that the mission had long since collapsed.

In 1914–15 Mr. and Mrs. Scoresby Routledge paid a long visit to Easter Island in the interests of scientific, and especially archaeological, research, staying there sixteen months. All or nearly all of the survivors from Tahiti and the Gambier Islands mission had been sent home, with their children and grandchildren, and the natives then numbered 250. They seemed a restless, dissatisfied community, dirty and uncouth, and incorrigible thieves. They conducted their own form of worship, based on the teachings of the former French Roman Catholic missionaries, there being no longer any resident priest or lay brother. During Mrs. Routledge's stay an old woman 'dreamt' that her people were the real and exclusive owners of the island and all the property there. A spirit of revolt against the resident agent, Mr. Edmunds, and strangers in general, was thus engendered; some depredations were committed, and personal violence was threatened. The Chilean training-ship *Jeneral Baquedano*, which calls at the island about once in every two years, arrived opportunely and ended the trouble by deporting the ringleaders.[1]

A significant event took place in October 1914—the breach of neutrality committed by the German cruisers *Gneisenau* and *Scharnhorst* under Admiral von Spee. These vessels put into Cook Bay, landed armed parties, re-provisioned with fresh meat, and set up a look-out station fitted with signalling gear on the summit of the island. In December the *Prinz Eitel Friedrich* arrived, and used the island for about a week as a base, to secure fresh meat, and to coal from a captured French collier which she afterwards sank. Before leaving she put ashore nearly fifty prisoners, English and French sailors, and abandoned them to shift for themselves.[2]

Finally, towards the close of 1917, or early in 1918, fifty-eight officers and men who had formed part of the crew of the German raider *Seeadler*, wrecked at Mopihaa, having seized a schooner, reached Easter Island. There, either by accident or intention, this vessel was also wrecked ; and the Germans were afterwards conveyed in a Chilean schooner to Valparaiso.[1]

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[1] Routledge, in *Geographical Journal*, xlix. 326.

[2] Routledge, *op. cit.*, pp. 326-7.

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[1] *The Times.*

III. ECONOMIC CONDITIONS

(1) Anchorages

Easter Island possesses no harbour, nor any permanently sheltered roadstead; but vessels can bring to temporarily in fine weather under the lee of the land for the time being, on a bank of soundings in from 30 to 16 fathoms, where the bottom is sandy with rocky patches here and there. This bank extends for a mile or so to seaward almost all round the island; the shore, however, is for the most part rocky and inaccessible, and affords only some six possible landing-places, three of which have sandy beaches of small extent.

At Hanga Roa a steamer may safely approach the 16-fathom line; but the landing is not very good, shoal water full of boulders extending for some distance from the beach. This anchorage is only secure during winds from the eastward; from April to October it is liable to sudden shifts and Hanga Roa becomes a dangerous lee shore.

There is a much better landing-place at Hanga Piko, though the channel leading into it between the rocks is very narrow, and, with any swell on, the breakers are alarming.

La Pérouse Bay, which ought to be called González Roadstead, is an open stretch of two miles on the north-eastern coast. Anchorage may be found there in 17 fathoms, but preferably farther out lest the wind change suddenly. Anakena cove just to the westward of the former has a small sandy beach and affords the best landing of any, except with the wind nearly due north. Occasionally a vessel may anchor off Waihu, but the weather must be closely watched in such case.

Far removed from all trade routes, Easter Island is visited in normal times about once a year by a small schooner from Valparaiso. A Chilean training-ship usually calls there every second year; and ships of war of other nations look in from time to time.

(2) Agriculture and Products

Most of the island is covered with grass, but the soil is not lacking in fertility and, assisted by a generous rainfall, enables the natives to cultivate sweet potatoes, a few yams, bananas, and sugar-cane in pits sheltered from the wind, and particularly within the craters of the extinct volcanoes. Among the natural products of use to the natives one is the 'maute' (*Broussonetia papyrifera*), whose inner bark, when macerated in water and beaten out into what is known as 'tapa' or native cloth, used to be made up into wraps and clothing. Another is the 'purau' (*Hibiscus tiliaceus*), which yields a strong bast suitable for making fishing-nets, mats of a superior kind, and cordage generally. The 'ti' (*Cordyline terminalis*) is grown for the sake of its root, out of which a saccharine material is freely extracted.

The island has no trees; there probably never was much more than brushwood (*Sophora tetraptera*) and shrubs, and since the introduction of ponies, cattle, &c., even those have disappeared. There is plenty of good pasture, and as there are two and sometimes three lambing seasons in the year, the sheep multiply very rapidly.

There are few fish on the coast, but turtles are abundant, and round the southern promontory quantities of lobsters (*Palinurus paschalis*) are found, much larger than those taken in European waters.

A Chilean company, the Compañía Esplotadora de la Isla de Pascua, are the owners of about two-thirds of the land in the island, and in addition of a certain amount of live stock. They find, however, considerable difficulty in marketing the produce, although they send a schooner to the island once a year to bring away the hides and wool.

There are no indications of minerals or of phosphate rock in the island, nor is the geological formation of a kind to render their presence likely.

IV. GENERAL OBSERVATIONS

The remoteness and isolation of Easter Island and the backwardness of its native inhabitants have served to keep it far in the background of political importance. Though first visited by Dutch ships, there has been no action on the part of that nation to exploit it commercially or otherwise. The same may be said of the Spaniards—though they first annexed it—and of ourselves, though many more British ships of war and of commerce have called at it than have ships of any other nationality.

The nearest land (except the uninhabitable Sala y Gómez rock) to the eastward of Easter Island is the Chilean province of Atacama, to which, for administrative purposes, it is attached, though nearly 2,000 miles distant. To the westward the French colonies of the Tuamotu, Mangareva (Gambier), and Marquesas Islands, and the Society Group, are the only important settlements in those seas; and they are far away. British possessions in that part of the Pacific comprise no more than the three south-easternmost atolls of the Tuamotu (or 'Low') Archipelago, and Pitcairn. Of the atolls, Henderson Island has phosphatic deposits and would be valuable if they could be worked. It is the only elevated rock of the group. But landing is dangerous and seldom possible, and there is no fresh water. The only island of the four above mentioned possessing resources for permanent habitation is Pitcairn, which is 1,800 miles distant from Easter Island, and 1,125 miles from Tahiti, its only existing link with the outer world.

Easter Island cannot be esteemed of much commercial or pecuniary value; and, since it affords but scanty facilities to shipping, its principal interest to the world appears to be archaeological.

APPENDIX

I. DECLARATION OF SPANISH POSSESSION

D^N ANTONIO ROMERO, Staff-Paymaster in the Royal Navy, at present serving on board H.M. Ship of the Line named the *San Lorenzo.*

I certify—that, by direction of D^n Felipe González y Haedo, Captain in the Royal Navy, commanding this ship and the Frigate *Sta Rosalía* sailing under her escort, whom the Most Excellent Señor the Viceroy, Governor, and Captain-General of the Realm of Peru, D^n Manuel de Amat, under whose orders he is, has appointed for the investigation of this island, commonly marked on the charts by the name of David's, it has on the day and date hereof been examined by sea and land, and there has, in so far as is possible, been made known to and recognized by its native inhabitants their lawful Sovereign, and his powerful arm for their defence against foreign enemies, the which they have acknowledged with many demonstrations of pleasure and rejoicing. And in testimony of so happy an issue three crosses have, by their consent, been erected on the hill which is at the North Eastern extremity of the island; and the name *S^n Carlos* has been bestowed upon the said island, in the presence of the native inhabitants assembled to the number of eight hundred, and of all the officers, crew, and ship's company told off for the occasion under the command of D^n JOSEF BUSTILLOS, Knight of the Order of St. James and a Commander in the Royal Navy. The which three crosses being set up in position, the litany was sung; and at its conclusion a triple salute of musketry was fired by the aforesaid seamen and ship's company, and another of twenty-one guns by the ship and the Frigate.

And in order that this Act of solemn Possession may be made known and established by evidence, I declare this at the *Island of S^n Carlos*: the 20th of November, 1770.—D^N ANTONIO ROMERO.

II. Chilean Expedition in 1870

Mr. Thomson, His Majesty's Chargé d'Affaires at Santiago, reported (No. 4, January 16, 1870) that the Chilean corvette *O'Higgins* was about to visit Easter (Pascua) Island. He said that, so far as he was aware, no special reason for the cruise had been made public; he was, however, disposed to infer that the Chilean Government had some ulterior views of annexing the island should the commander of the *O'Higgins* report favourably as to its value.

In the following March, Mr. Thomson (No. 19, March 14) reported the return of the *O'Higgins*, after a stay of seven days at the island, and quoted the following passage from the official report of the expedition:

> 'Desirous to lose no time, I named the Commissions which were to employ themselves in making a plan of the island, of its port, and the creeks which might serve as anchorage grounds, and at the same time I instructed Commander Don Ignacio L. Gana, Director of the School of Naval Cadets, to obtain the necessary data so that the Supreme Government might be furnished with the complete and detailed report they had prescribed in their instructions issued to me.
>
> 'On the island there are some Roman Catholic Missionaries, dependent on the Bishopric of Tahiti, and, in a memorial addressed by them to the Intendant of Valparaiso, in alluding to the generous supplies which the Supreme Government had sent them through him, they request him to express their most grateful thanks to the Supreme Government.'

Mr. Thomson remarked that these expressions and the general tenor of the reports furnished would seem to confirm the inference he had drawn in his earlier dispatch as to the intention of the Chilean Government to take possession of the island as Chilean territory.

Copies of these two dispatches were sent to the Admiralty. It will be seen that they by no means assert that the Chilean Government had in fact taken possession of the island. (From papers at the F.O.)

III. TERMS OF LEASE OF EASTER ISLAND GRANTED IN 1895 TO SEÑOR ENRIQUE MERLET BY THE CHILEAN GOVERNMENT.

Extract from 'A Report by the Minister of Colonization presented to the National Congress, in 1895'. [Santiago de Chile, 1896.] Section—Terrenos Fiscales, pp. vii–x.

'EASTER ISLAND, situated at a considerable distance from our coast-line, and where the State has in past years incurred expenditure with a view to acquiring a foothold which would permit of the Republic's sovereignty being exercised over it, remained for some time without the Government having come to any conclusion regarding its future.

'In order to invest it with some utility it was decided to let it on lease, and by a Resolution of the 22nd of June this year sealed tenders were publicly invited for such a tenancy.

[Tenders were accordingly called for, and opened on August 29th, 1895, when Señor Merlet's offer received the preference and was accepted on the following conditions :]

'1. The State grants, under a lease to Señor Merlet for a period of twenty years from this date, the lands, buildings, fixtures, and live stock belonging to the national Treasury, in the aforesaid island.

'2. The annual rental shall be the sum of one thousand two hundred *pesos* ($1,200), to be paid into the Treasury at Valparaiso half-yearly in advance : and in the event of such payment becoming more than one hundred and eighty days overdue this agreement shall be cancelled.

'3. Señor Merlet binds himself to maintain at least three Chilean families in the island at his own expense, as a nucleus of a settlement [or colony].

'4. On the termination of the lease Señor Merlet will deliver over to the State without fee or remuneration the lands and fixtures which he shall have received by virtue of this Agreement, together with the improvements he may have introduced there, and will leave for possession by the State the following live stock, namely :—five thousand six hundred head of sheep, two hundred and fifty of horned cattle, forty ponies, and four asses.

‘5. Señor Merlet undertakes to maintain direct communication between the island and some [*sic*] of the ports of the Chilean coast, at least once in each year.

‘6. On occasions when the Government may dispatch ships of war on training voyages during which it may be possible to call at Easter Island, it will facilitate, free of any charge to Señor Merlet, the passages of Chilean colonists to the said island, and also the conveyance of tools and implements of labour.

‘7. Señor Merlet will provide dwelling accommodation for such person in the Government’s service as it may station at the island, and will allot an office suitable for his installation.

‘8. The lessee will cause accommodation to be built for the storage of coal which the Government may wish to deposit for the use of Chilean ships of war.

‘9. Señor Merlet will supply free of charge the fresh meat required as provisions for their crews by national ships of war calling at Easter Island.

‘10. In the event of national ships of war putting in with any members of their crews sick, and needing to be landed, Señor Merlet binds himself to afford them hospitality and assistance without its constituting a claim against the State.

‘11. Don Enrique Merlet undertakes to equip a landing-place for cargo which shall afford safe conditions for the purpose.

‘12. Should the State deem proper to establish a village settlement (*centro de población*) in the island it shall be free to make use of an area of land necessary for this purpose.

‘13. Señor Merlet will give a guarantee, approved by the Director of the Treasury, for the due fulfilment of this Agreement.

‘14. That officer, representing the Exchequer, will sign the public document embodying the present decree [or Order in Council, or Resolution].

‘Let this be put on record, registered, notified, and published.—MONTT.—*Claudio Matte.*

‘Santiago, 29th of August, 1895.

‘By a decree of the 24th of June last an Inspector of colonization was appointed for the above-mentioned island, without salary.’

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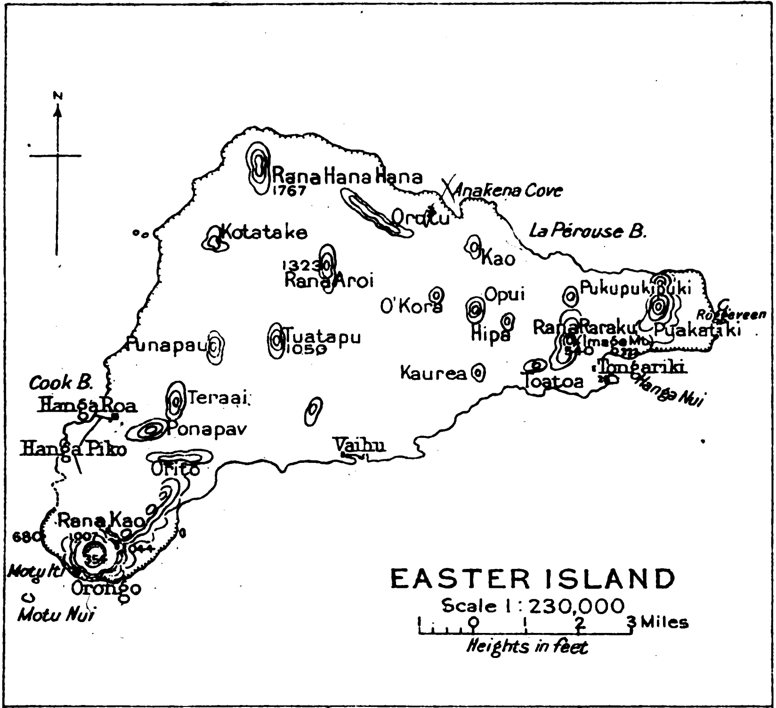

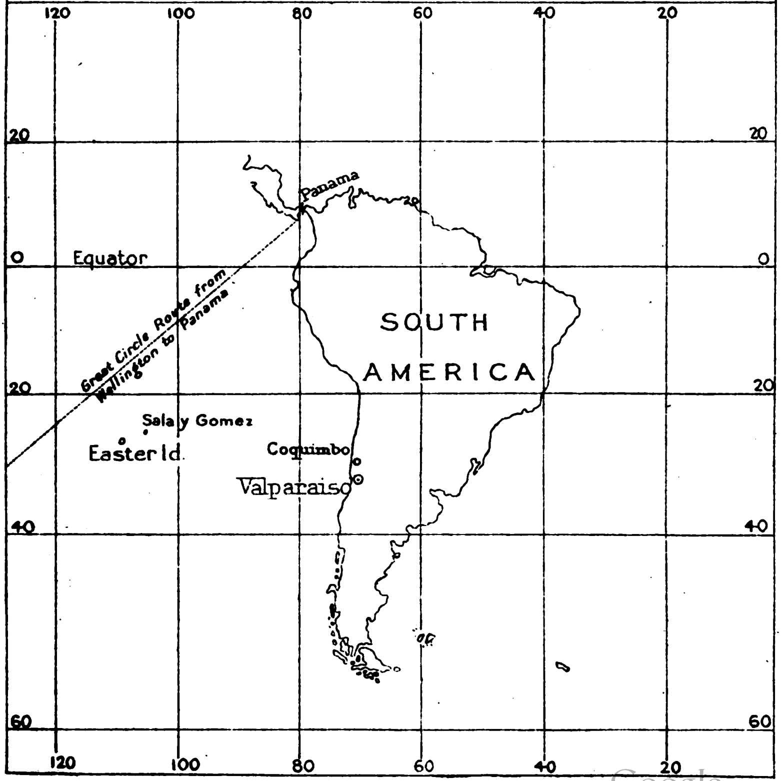

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I. GEOGRAPHY, PHYSICAL AND POLITICAL

General Position and Extent

The British possessions in the Pacific Ocean lie mainly south of the Equator, there being only a few small islands between the Equator and 5° north latitude. From about 170° east longitude to 155° west longitude practically all the islands south of 5° north latitude are British, with the exception of Samoa, some islands belonging to the United States, and the Horne (Hoorn) and Wallis Islands, which are French. East of 155° west longitude most of the islands are French, but the most easterly islands of the central Pacific, beyond the French possessions, are British. West of 170° east longitude there are also a number of British islands.

The New Hebrides, administered jointly by Britain and France, and British New Guinea with its adjacent islands, are treated respectively in Nos. 147 and 88 of this series.

The following are the chief British groups of islands with their approximate areas:—

	Square miles.
Lord Howe Island	5
Norfolk Island	13
Chatham and Pitt Islands ...	58
Cook and adjacent islands ...	390
Solomon Islands	14,800
Santa Cruz Islands	380
Gilbert Islands	166
Ellice Islands	14

	Square miles.
Union or Tokelau Islands	7
Phœnix Islands	18
Fanning and Washington Islands	21
Fiji Islands and Rotumá	7,082
Tonga Islands, with Vavau ...	390
British Line Islands	20
Pitcairn and adjacent islands ...	10
Total	23,374

The Cook and Hervey Islands and the Kermadec Islands belong to New Zealand, Norfolk Island to the Commonwealth of Australia, and Lord Howe Island to New South Wales.

LORD HOWE ISLAND

Lord Howe Island, which forms part of the state of New South Wales, lies in 31° 30′ south latitude and 159° 5′ east longitude, 436 miles from Sydney. It is mountainous throughout, rising to an elevation of 2,840 ft. in Mount Gower. The coasts are steep, and landing is often difficult.

The climate is mild and healthy. Temperatures of 52° and 82° have been recorded, and the rainfall averages 79 inches a year. The prevailing winds are south-west in winter, and north-east in summer. The soil is fertile, but suffers a little from lack of water. Tanks for the storage of rainwater have been constructed.

The first settlers were three white men, who came, with their Maori wives and two lads, from New Zealand in 1833 or 1834; but they were subsequently bought out, and their place was taken later by Australian emigrants. The population in 1911 numbered 107.

NORFOLK ISLAND

(1) Position and Extent

Norfolk Island, a dependency of the Commonwealth of Australia, lies in 29° 3′ south latitude and 167° 58′ east longitude, 930 miles from Sydney. Adjoining it are the islets of Nepean and Philip.

(2) Surface and Coasts

Norfolk Island has an undulating surface at a general elevation of about 400 ft., rising to 1,050 ft. in Mount Pitt. The soil is fertile. The coasts are cliff-bound, except on the south-west, and fringed with coral reefs.

(3) Climate and Sanitary Conditions

The climate is warm and equable, and the mean temperature ranges from 60° F. (15·5° C.) in July to 72° F. (22·2 C.) in February. The rainfall averages 54 in. (1,370 mm.) a year, and the degree of humidity is high. The winds are mainly westerly in winter and easterly in summer. The climate is healthy.

(4) Population

Norfolk Island was from 1826 to 1855 a New South Wales penal settlement. In 1856 the convicts were removed and their place was taken by 193 settlers brought from Pitcairn Island. In the course of a few years a number of them returned to Pitcairn Island, and the remainder showed signs of deterioration. They have, however, since increased in numbers, and in 1915 the population was 721, including some missionaries. There were also 108 Melanesians being trained for mission work.

CHATHAM ISLANDS AND OTHERS ADJACENT TO NEW ZEALAND

The *Chatham Islands* are in 43° 50′ south latitude and 177° west longitude, 536 miles east of New Zealand. The area of Chatham Island is 35 square miles, and that of Pitt Island about 23 square miles.

In 1916 the population comprised 219 Europeans and 250 Maoris.

The *Auckland Islands* lie in 50° 31′ south latitude and 166° 19′ east longitude, 200 miles south of Stewart Island (N.Z.). The area of the largest is 330 square miles.

Campbell Island, situated in 52° 33′ south latitude and 169° 9′ east longitude, 180 miles south-east of the Auckland Islands, is a mountainous volcanic island 36 miles in circumference. It is uninhabited, as are also *Bounty Island*, situated in 47° 44′ south latitude and 179° 7′ east longitude, and the *Antipodes* group, situated in 49° 32′ south latitude and 178° 42′ east longitude.

The *Kermadec Islands*, a dependency of New Zealand, are situated between 29° 10′ and 31° 30′ south latitude, and between 177° 50′ and 179° west longitude. They consist of four small and widely separated islands—Raoul or Sunday, Macauley, Curtis, and L'Espérance or French Rock. Their total area is about 13 square miles, Raoul occupying about 11½ square miles and Macauley 1¼ square miles. Raoul Island is about 600 miles from Auckland (N.Z.).

The islands are entirely volcanic. The surface is rugged and broken, and the highest elevation is 1,723 ft., on Raoul Island. In most places steep cliffs face the sea, but there are a few coves where landing is possible. The soil is very fertile. Raoul Island has four crater-lakes, of which three are fresh, but they are difficult of access.

The climate is mild and equable, and slightly warmer than in the north of New Zealand. Rainfall is fairly plentiful. South-westerly and westerly winds prevail in winter, and north-easterly and easterly winds in summer.

There is no native population. In 1914 the inhabitants numbered four, and consisted of one family from New Zealand. In 1916 the islands were uninhabited.

Macquarie Island, which lies on meridian 159° east longitude, about 500 miles S.W. of Stewart Island (N.Z.) and 800 miles S.E. of Tasmania, has recently acquired some importance.

COOK AND HERVEY ISLANDS WITH NIUÉ OR SAVAGE ISLAND

(1) Position and Extent

The Cook and Hervey Islands (governed from New Zealand) lie west-south-west of the Society Islands, and extend from 18° 48′ to 22° south latitude, and from 157° 20′ to 160° west longitude. They comprise the scattered islands of Rarotonga, Mangaia, Mauke, Mitiero, Atiu, Takutea, Manuai, Te Au-o-Tu and Aitutaki. With these may conveniently be grouped several isolated islands scattered within the area claimed by New Zealand. These other islands include Palmerston, Suvarov, Manahiki, Rakahanga, Penrhyn or Tongareva, Pukapuka (Danger), Nassau, and Niué or Savage Island. The total land area of all these islands is about 390 square miles, of which Niué occupies about 100 square miles and Rarotonga about 16 square miles.

(2) Surface and Coasts

The larger islands of the Cook group are of volcanic formation, with a certain amount of coral rock, rising to heights of 100 to 600 ft., and in Rarotonga even to 4,000 ft. Mitiero, Atiu and Takutea, and the two Hervey Islands, Manuai and Te Au-o-Tu, are coral banks. The volcanic islands are well watered and fertile, meeting the sea in steep cliffs interrupted in places by sandy beaches. Each is surrounded by a reef. The other islands described in this section are either atolls enclosing lagoons, or low coral banks, with the exception of Niué Island, which rises to a height of about 220 ft.

The water supply of the volcanic islands is generally good, but that of the coral islets poor.

(3) Climate

The climate of Rarotonga may be taken as typical of these islands, about most of which no data are available. The temperature from December to April averages 78° F. (25·5° C.), and from July to October 72° F. (22·2° C.). Light south-east trade-winds prevail throughout the year, but are liable to be interrupted by westerly winds, often blowing as gales, from November to April. At Palmerston Island heavy north-easterly and easterly gales occur in January and February. Rainfall averages 79 in. (2,000 mm.) and occurs in all months, but chiefly in the warm season.

(4) SANITARY CONDITIONS

Most of the islands seem to be fairly healthy, but tubercular diseases are widespread. Venereal disease are not common, but there are cases of elephantiasis, while leprosy exists on Penrhyn Island. In Niué Island there is much skin disease and ophthalmia. There is no malaria, but diarrhœa is common.

(5) RACE AND LANGUAGE

The natives are Polynesians with a Melanesian strain. Their dialects differ a good deal, but all are allied to Samoan. English is taught, but the *bêche-de-mer* jargon is still the only *lingua franca*. Practically all the natives profess Christianity. The Cook Islanders and the Niué and other islanders are peaceful and civilized.

(6) POPULATION

In 1911 the total population of the Cook and Hervey Islands was 6,964, of whom 2,759 were on Rarotonga, 1,471 on Mangaia and 1,237 on Aitutaki. The other islands had a total population of 5,634, including 3,943 on Niué and about 400 on Penrhyn Island. The total population in 1916 was 12,797. The white population numbers about 160, of whom over 100 are in Rarotonga. Avatu (population about 1,000), in Rarotonga, is the seat of administration. Niué Island has a separate administration with headquarters at Alofi.

The birth-rate now slightly exceeds the death-rate, but until recent years brought improvement in sanitation, and a prohibition of the use of alcohol, the population was decreasing. The island suffered much in the early sixties from the raids of Peruvian labour snatchers. The Niué Islanders are said to be increasing in numbers.

SOLOMON ISLANDS

(1) Position and Extent

The Solomon Islands lie to the east of New Guinea and the Bismarck Archipelago in a chain running north-west and south-east. They extend from about 4° to 13° south latitude, and from 154° to 163° east longitude. The two most westerly islands, Buka and Bougainville, and a few outlying groups to the north, Sir Charles Hardy, Carteret, Mortlock, and Tasman, were German, as were also the islands of Rantan, Tauroto, Aiaisina, and a few islets off the coast of Bougainville. All the other Solomon Islands are British, the chief being Choiseul, Ysabel, New Georgia, Malaita or Mala, Florida, Guadalcanal, San Cristoval or Bauro, and the smaller islands of Shortland, Treasury, Gizo, Gower, Liueniua or Lord Howe's Island,[1] and Rennell or Maugana. The Santa Cruz Islands, under the Solomon administration, are considered in a separate section (p. 10).

The Solomon Islands are about 1,560 miles from Sydney, and 1,060 miles from Queensland. The total land area of the British Solomons, exclusive of the Santa Cruz group, is about 14,800 square miles, but many of the islands are as yet imperfectly surveyed. Guadalcanal covers 2,500 square miles, Malaita 2,000 square miles, Ysabel 1,800 square miles, and Choiseul 1,500 square miles.

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[1] Formerly called Ongtong Java. Its native name is also spelt Lua-ngiua.

(2) Surface, Coasts, and Rivers

The larger islands are long and narrow, and traversed from end to end by mountain ranges. Guadalcanal rises to over 8,000 ft. in Mount Lammas, and the heights of the other islands range between 2,500 ft. and 5,000 ft. Lofty spurs, separated by deep valleys, run down to the coast, often terminating in bold headlands There is very little low-lying flat land, and probably the largest area of it is that which stretches along the north coast of San Cristoval. A few small islands such as Ugi, Stirling and Treasury are chiefly coral in formation, while Liueniua is a large atoll 40 miles long by 10 wide. Most of the volcanoes are extinct, but those on Narova, Savo, and Vella Lavella are only dormant.

The volcanic soils and those of the crystalline rocks are very fertile, and even the sand and limestone soils are fairly productive.

The coasts are in some places steep and in others low and sandy or fringed with mangroves. Coral reefs are general on the east coasts of most of the western islands, but less continuous among the eastern islands. Safe harbours are numerous in nearly all the large and many of the small islands, but few of them have been thoroughly explored.

The large islands have many streams, mostly mountain torrents. Water is plentiful on all the islands except the coral atolls and banks.

(3) Climate

There is practically no cool season, the temperature ranging from 81° to 84° F. (27° to 29° C.) throughout the year. The seasons are marked principally by the change in wind. Trade-winds blow from April or May to October or November. They are usually east-south-east, but sometimes they back to the north or even to the north-west, and are then accompanied by squalls and rain. The north-west monsoon blows from November to the end of March, and occasionally veers to the west and south-west. Calms and variable winds are frequent at that season.

The rainfall is heavy, and in the lofty interior, for which there are no records, it must average well over 200 in. (5,000 mm.) a year. At sea-level it varies from 110 in. to 150 in. (2,750 mm. to 3,750 mm.). Some rain falls in every month, but from December to March is the wettest period, while June is the driest month.

(4) Sanitary Conditions

Malaria attacks all Europeans sooner or later, but generally, it is said, in a mild form. Dysentery is more serious, and has been a great scourge. On the whole, however, the natives have contracted few diseases except influenza, which sometimes causes heavy mortality. A skin disease known as Tokelau ringworm (*Tinea imbricata*) is common, while ulcers afflict both natives and whites. The European death-rate is about 27 per 1,000. The lofty islands might furnish admirable sites for hill stations when the natives are more under control.

(5) Race and Language

The natives are chiefly of Melanesian stock with some Papuan admixture in the eastern islands. In Liueniua the prevailing type is Polynesian, although there is some mixture of Melanesian blood, but the Stewart Islanders are pure Polynesians.

The languages spoken are various dialects of Melanesian, with the exception of the Polynesian tongue in use in Liueniua and Stewart Island. The *lingua franca* is *bêche-de-mer* English.

The natives are restless and warlike, addicted to head-hunting and cannibalism; and on many of the larger islands, especially Malaita and Choiseul, there is incessant warfare. Towards whites they have the reputation of being cruel, treacherous, and revengeful

(6) POPULATION

The estimated native population in 1915 was 150,000. Malaita is said to be the most densely populated island. The white population in 1915 was over 660, and in 1913 it was 418, including 396 British, 33 French (all missionaries), 7 Germans, and 2 others. The capital of the Protectorate is Tulagi, near Florida.

The population seems everywhere to be decreasing, in some islands at a great rate. In Malaita, Choiseul, and other islands the decrease is attributed to the continual warfare between the tribes, while the prevalence of dysentery also accounts for many deaths.

SANTA CRUZ ISLANDS

(1) POSITION AND EXTENT

The Santa Cruz Islands, or Queen Charlotte group, comprise about a dozen islands lying east by south of the British Solomon Islands. The group extends from about 9° 30′ to 12° south latitude, and from 165° 30′ to 167° 30′ east longitude. Santa Cruz or Ndeni, which occupies an area of about 200 square miles, is the largest island. Vanikolo, the next largest, is less than half this size. The other islands are quite small and include the Swallow or Matema Islands, the Duff or Wilson Islands, and Utupua. Tikopia, Anuda or Cherry, and Fataka or Mitre are three isolated islets lying 130 to 200 miles east of Vanikolo. The total land area of all the islands described in this section is about 380 square miles.

(2) SURFACE AND COASTS

The islands are all volcanic and some of them are lofty. Vanikolo attains a height of 3,031 ft., Tinakula or Volcano Island about 2,200 ft., Tikopia 1,235 ft., and Disappointment Island 1,200 ft. The rest of the islands are only from 100 to 200 ft. in height. There

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is little level ground except on Santa Cruz and Anuda, and coral reefs are rare.

All the larger islands have small streams which run throughout the year.

(3) CLIMATE AND SANITARY CONDITIONS

The climate is hot and damp all the year round, and is reported to be unhealthy, malaria and other fevers being prevalent. Malignant ulcers are a common complaint. The smaller islands, including Tikopia and Anuda, are less unhealthy.

(4) POPULATION

The natives are Melanesians, with a certain admixture of Polynesian blood, but in Tikopia, the Duff Islands, and Anuda they are almost pure Polynesians. The number of natives is estimated at about 5,000. Most of the inhabitants live near the coast, and there are several villages.

The natives are well built and vigorous, but their numbers seem to be decreasing. In character they appear of late to be friendly and anxious to trade. Cannibalism is probably not altogether extinct. *Bêche-de-mer* English is spoken on some of the islands.

The white population perhaps numbers 4 or 5; these are usually missionaries and traders.

GILBERT AND ELLICE ISLANDS

(1) POSITION AND EXTENT

The Gilbert and Ellice Islands, with the Union Islands and Washington and Fanning Islands, are grouped together as one colony for administrative purposes.

The Gilbert or Kingsmill Islands consist of sixteen atolls or groups of islets lying between 3° 10′ north and 2° 40′ south latitude, and 172° 30′ and 177° east longitude. The principal ones are Butaritari or Makin, Maraki, Abaiang, Tarawa, Maiana, Abemama or Apamama, Kuria, Ananauka or Aranuka, Nonouti, Tabeteuea, Beru or Peru, Nukunau, Onoatoa, Tamana, Arorai, and Ocean, Banaba or Panaopa. The last named lies some 200 miles to the west of the other islands of the group. The Ellice Islands are a chain of nine small islands or clusters of islets to the south-east of the Gilberts, extending north-west and south-east for about 360 miles. They lie between 5° 45′ and 10° 45′ south latitude and 176° 10′ and 179° 50′ east longitude. The chief islands of the group are Nanomea, Nanomago, Niutao, Niu, Vaitupu, Nukufetau, Funafuti, Nukulailai, and Niurukita. All of these islands, as well as those in the Gilbert group, have English names in addition to their native ones, but the former are now never used.

About 180 miles to the north of the Gilberts lie the Marshall Islands, a former German possession. Nauru or Pleasant Island, also formerly German, lies 160 miles west by north from Ocean Island.

The total land area of the Gilbert Islands is 166 square miles, and of the Ellice Islands 14 square miles.

(2) SURFACE AND COASTS

Practically all these islands are low coral atolls enclosing large lagoons. There are no rivers, and water can be obtained only by collecting rainwater in tanks, as in Ocean Island, or by digging wells.

(3) CLIMATE

The climate is warm and equable, the mean temperature for all months being 83° to 86° F. (28·3° C. to 30° C.). Easterly trade-winds prevail from April or May to October or November, and in Butaritari they blow throughout the year. Most of the islands experience variable north-westerly and westerly winds between November or December and March or April. In the Ellice Islands the rainfall varies from 100 in. to 140 in. (2,500 mm. to 3,500 mm.) in the year; but in the central and southern Gilberts and Ocean Island it may fall to as little as

15 in. (375 mm.) a year during one of the droughts which periodically occur. In years of abundant rainfall Ocean Island has a rainfall of 100 in. to 140 in. (2,500 mm. to 3,500 mm.). The northern Gilberts have a normal annual rainfall of over 100 in.; rain falls in all months.

(4) SANITARY CONDITIONS

Tubercular diseases are common among the natives, and their increase is attributed to the adoption of European dress and habits. On the other hand, the climate is said to be beneficial to Europeans suffering from asthma. There is no malaria, but dengue fever occasionally occurs. Dysentery and yaws are common. There are many cases of elephantiasis in the Ellice Islands, but few in the Gilberts. Leprosy, on the other hand, is found chiefly in the Gilberts, where every island has a leper asylum. A skin disease known as Tokelau ringworm (*Tinea imbricata*) is common.

In recent years the Government has taken energetic measures to combat disease, and there is reason to hope that the state of health of the natives will gradually improve.

The health of the Europeans is satisfactory, and it is noteworthy that there is said to be no danger of sunstroke.

(5) RACE AND LANGUAGE

The natives are Polynesians, but in the Gilbert Islands there is a mild Melanesian strain, the mixture of the two resulting in the race known as Micronesian. Polynesian is the language spoken, and *bêche-de-mer* English is also used. The natives are now quite peaceable, and carry no weapons.

(6) POPULATION

Nearly all the islands are densely populated, and in some the population is so numerous that the entire island appears like a huge village. In 1911 the total native population of the Gilberts, with Ocean Island (1,284), was 26,417, and of the Ellice Islands 3,084. The Asiatics in 1911 numbered 252, of whom 226 were Japanese labourers on Ocean Island and the remainder chiefly Chinese traders. The Europeans numbered 199, of whom 111 were on Ocean Island, 84 on the other Gilberts, and 4 in the Ellice Islands.

Trading stations are scattered about the islands, but the only considerable number of Europeans is found on Ocean Island, which is the seat of government for the whole colony.

It is generally believed that, at least until recent years, there was a steady decrease of population, which in the Gilberts was probably due to the continual fighting between the tribes. In both the Gilbert and the Ellice Islands a considerable loss of population may be attributed to the export of labour to various other Pacific Islands, and to the raids of Peruvian slavers. In both groups, taken together, the birth-rate is now slightly in excess of the death-rate, and in 1916 statistics showed the increase to be 200 in three years.

UNION OR TOKELAU ISLANDS

(1) Position and Extent

The Union or Tokelau group extends from 8° 38′ to 11° 3′ south latitude, and from 171° 5′ to 172° 28′ west longitude. It consists of four islands or groups of islets—Atafu or Duke of York, Nukunono or Duke of Clarence, Fakaofu or Bowditch, and Gente Hermosa or Swain's Island. The total land area is 7 square miles. The Ellice Islands, with which the group is administered, lie about 600 miles to the west.

(2) Surface and Coasts

All the islands are low coral atolls, enclosing lagoons. Fresh water is not plentiful, and is obtained by digging wells or collecting rainwater.

(3) CLIMATE AND SANITARY CONDITIONS

The climate probably resembles that of the Phœnix Islands (see below, p. 17). It is reported to be healthy, but the natives suffer a good deal from tuberculosis and elephantiasis.

(4) POPULATION

The population in 1911 consisted of about 900 Polynesians and 2 Europeans. The language is allied to that of Samoa, and *bêche-de-mer* English is also spoken. All the islands are inhabited, but the majority of the population live on Atafu and Fakaofu. The people are peaceful and good-natured.

FANNING AND WASHINGTON ISLANDS

(1) POSITION AND EXTENT

These two coral atolls are the most northerly British islands in the South Pacific, and by reason of their administration it is convenient to treat them separately. Fanning Island lies in 3° 51′ north latitude and 159° 22′ west longitude, and Washington or New York Island in 4° 43′ north latitude, 160° 25′ west longitude. The area of Fanning Island is 15 square miles, and of Washington Island 6 square miles. Fanning Island is 1,880 nautical miles from Ocean Island, the administrative centre of the Gilbert and Ellice Islands, to which both these islands are attached.

(2) SURFACE AND COASTS

Fanning Island is a low coral atoll, 2 ft. to 10 ft. above sea-level, enclosing a shallow lagoon. The coral belt nowhere exceeds 1,500 yards in width. The beach is steep-to, and landing is difficult on account of the surf, except at Whaler anchorage in the north-west, where the cable is landed.

Washington Island is also a low coral atoll, 10 ft.

above sea-level. The lagoon is small, and has no entrance. There is no harbour.

Well-water is good and plentiful on Fanning Island but Washington Island is not so abundantly supplied.

(3) CLIMATE AND SANITARY CONDITIONS

The temperature varies little throughout the year: it averages from 81° F. (27° C.) to 82° F. (27·5° C.) Easterly trade-winds blow in all months. The total annual rainfall averages 118 in. (3,000 mm.). It falls principally between January and June, but no month is without rain.

The islands appear to be healthy.

(4) POPULATION

All the population has been introduced in recent years. Fanning Island has a population of about 150, including the white employees at the cable station. Washington Island in 1901 had a coloured population of about 130.

PHŒNIX ISLANDS[1]

(1) POSITION AND EXTENT

The Phœnix group consists of eight small islands and several reefs scattered between 0° 50′ north latitude and 4° 40′ south latitude, and between 176° 40′ and 170° 43′ west longitude. The chief islands are Gardner or Kemins, Hull, Sydney, Phœnix, Birnie, Enderbury, Canton or Mary, with, farther to the north, Baker and Howland. The total land area of the group is about 18 square miles. The great circle tracks between Sydney and San Francisco and between Fiji and Hawaii pass through the group.

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[1] It is difficult to know to what administrative area to assign these islands, as they were not mentioned in the Order in Council of 1892 annexing the Gilbert and Ellice Islands, with which it would seem natural to include them.

(2) Surface and Coasts

The group is entirely composed of low coral islands surrounded by fringing reefs.

(3) Climate

The climate is warm and equable, with an average temperature of about 80° F. (26·6° C.) throughout the year. Easterly winds blow in all months. There is very little rain, but light showers may fall in any month.

(4) Population

The only inhabitants are native labourers imported by the Samoan Shipping and Trading Co. to work the few coconut plantations. They number about 50.

FIJI ISLANDS AND ROTUMÁ

(1) Position and Extent

The Fiji Islands consist of an archipelago of some 200 islands, extending from 15° 40′ to 21° south latitude, and from 176° 50′ east to 178° west longitude. They may be divided into eight main groups:—(i) The Ono group, a cluster of six islets in the extreme south; (ii) the Lakemba group of about 33 islands, of which Lakemba itself is the largest; (iii) the Exploring Islands, comprising about 10 islets, of which Vanua Mbalavu is the largest; (iv) Lomai Viti or Inner Fiji, about 12 or more scattered islands in the Koro Sea; (v) Vanua Levu, Taveuni, and the Ringgold Islands; (vi) Viti Levu and the islands adjacent; (vii) Kandavu; and (viii) the Yasawa group. The last three are often called the Western or Leeward group, while the Lakemba and Exploring Islands are often grouped together as the Lau, Eastern, or Windward group. The isolated island of Rotumá, in 12° 30′ south latitude, 177° 5′ east longitude, 280 miles north-west by north from the north-eastern end of Vanua Levu, is included in the Fiji administration.

The areas in square miles of the chief islands are as follows: Viti Levu, 4,112; Vanua Levu, 2,342; Taveuni, 217; Kandavu, 124; Koro, 58; Ngau, 45; Ovalau, 43; Vanua Mbalavu, 24; Lakemba, 12; and Rotumá, with adjacent islets, 14½. The total land area of the Fiji Islands, excluding Rotumá, is 7,068 square miles.

The town of Suva is 1,740 miles from Sydney, and 1,160 miles from Auckland, New Zealand.

(2) SURFACE, COASTS, AND RIVERS

Surface

With the exception of a few coral atolls, chiefly in the Ringgold, Exploring, and Lakemba groups, the islands are of volcanic formation, and, as a rule, mountainous and rugged. In form all the larger ones are characterized by a central mountain axis, lying roughly across the direction of the south-east trade-winds. Viti Levu has a central mass of mountains from which spurs separated by deep valleys radiate towards the coasts; the highest summit is Tomanaivi, or Mount Victoria (4,341 ft.). The valleys generally contain rivers of considerable size, and towards the sea open into wide plains. Except, however, for these river plains and the Rewa plain (the largest in Fiji) the island has little low-lying ground. Vanua Levu contains one long range, the central part of which is called Korotini; but there are plains in the north and south-west. The Ndreketi plain is the second largest in Fiji. The highest peaks are Soro Levu (3,387 ft.), Mbatini (a few feet lower), and Ndikeva or Mount Thurston (3,139 ft.). Taveuni rises to a height of 4,072 ft. in Ulu-i-ngalau; and the highest point of Kandavu is Mount Washington (Na Mbuke Levu), 2,750 ft. Ovalau has little level ground; its highest point is Na Ndelai Ovalau, or "the summit of Ovalau" (2,053 ft.). Rotumá is hilly, but has no elevation over 850 ft. A low narrow isthmus divides it into two unequal parts.

The volcanic soil, particularly on the windward side of the islands, is very fertile, and the alluvial plains and deltas are exceptionally rich. The water supply, except on a few atolls, is abundant. Hot springs occur in Vanua Levu, Ngau, and other islands.

Coasts

The coasts of the volcanic islands are generally rugged and steep, and bordered by coral reefs which are interrupted opposite the mouths of the rivers.

Rivers

The rivers of Vanua Levu and Viti Levu are by comparison large and numerous. The most important is the Rewa on Viti Levu, whose valley is very fertile. This river enters the sea by several channels. For 25 miles above the bar the river in many places is 200 yards wide. West of the Rewa is the Navua, and further west is the Singatoka, a large stream, and on the west coast is the Mba River. In Vanua Levu the rivers are chiefly on the north of the island, and several afford access to the plains through the coastal range. The largest is the Ndreketi. The streams on the smaller islands are of no importance except in providing a good supply of water.

(3) CLIMATE

The climate is warm and humid. The coolest months are July and August, with a temperature of about 74° to 77° F. (23·3° to 25° C.) at sea-level, and 50° F. (10·0° C.) in the hills. January and February are the warmest months, with an average temperature of 81° F. (27° C.) at sea-level and about 60° F. (15·5° C.) in the hills.

Rainfall at Suva averages 108 in. (2,750 mm.), and varies from 148 in. (3,750 mm.) to 95 in. (2,400 mm.). At Levuka it averages 90 in. (2,300 mm.). It is always heavier on the eastern than on the western side of the lofty islands, and at high altitudes the average is higher, and on low coral islands lower, than that given above. The rainfall in Rotumá averages 197 in. (5,000 mm.), and the heaviest rain occurs between November and May. The so-called dry season is from May to September, but heavy rains may occur in any month.

The prevailing winds are from the north-east and south. Hurricanes blow between December and March, on an average one every four years, and often do great damage.

(4) SANITARY CONDITIONS

The Fiji Islands are on the whole healthy to Europeans, though the climate is enervating during the hot season. Endemic malaria is unknown.

The natives suffer a good deal from dysentery, yaws, filariasis, pneumonia, and leprosy; and tubercular diseases seem to be on the increase. Syphilis never attacks the Fijians.

The principal hospital is at Suva, but there is a branch hospital at Levuka. There are also eleven smaller hospitals in charge of natives; and a leper segregation station at Makongai. Sanitation in the Fijian villages has been improved in recent years.

(5) RACE AND LANGUAGE

The natives are Melanesians with much Polynesian admixture, and the Rotumáns are pure Polynesians. Fiji also contains a large number of natives of India, some of whom are indentured labourers, although a larger number live as free settlers. The Fijian language has many dialects, but that of Mbau is generally accepted as the standard form. Both Fijian and Rotumán are mixed Melano-polynesian languages.

For some years cannibalism has been completely abandoned, and the Fijian is now peaceful and has adopted a certain degree of civilization.

(6) POPULATION

Distribution and Density

The total population of Fiji, including Rotumá, was estimated in 1915 to be 159,321. This included 89,574 Fijians and 56,853 Indians. On December 31, 1917, the estimated population was 165,991, including 91,013 Fijians and 61,153 Indians. In 1914, the last year for which detailed figures are available, the total population was 155,167, and included 88,775 Fijians, 53,589 Indians, 2,567 half-castes, 2,525 so-called Polynesians, 1,958 Rotumáns, 511 Chinese, 4,453 Europeans (including 24 at Rotumá), and 789 not specified.

About 80 of the 200 islands are inhabited permanently. On the larger islands the population is densest on the lower ground near the coasts and in the river valleys. The Fijians live in small towns and villages, and the free Indians have settlements of their own. The two races do not intermarry.

The chief town is Suva, on the south-east of Viti Levu, which in 1914 had a population of 5,122, including 1,533 Europeans, 1,285 Indians, 800 Fijians and 111 Chinese. The second town is Levuka, the former capital, on the east of Ovalau, which consists of little more than one street stretching for about a mile along a narrow strip of beach. Lautoka, on the north-west of Viti Levu, is a growing place.

Movement

Long before the arrival of the white man the population of Fiji seems to have been decreasing. Fighting and cannibalism no doubt contributed to this decrease, but can scarcely account for it altogether. The decrease continued after European settlement, but eight or ten years ago it appears to have ceased, and since then the population has been slowly increasing. The figures given above show an increase of 2·6 per cent. between 1914 and 1915, and of 4·2 per cent between 1915 and 1917. In 1916 among Fijians the births were 3,122, deaths (decreasing among children) 2,267; among Indians, births 2,150, deaths 518; among Europeans, births 79, deaths 37.

TONGA ISLANDS

(1) POSITION AND EXTENT

The British Protectorate of Tonga or the Friendly Islands extends from 15° to 22° 20′ south latitude, and from 173° 50′ to 176° 15′ west longitude. The islands, about 100 in number, lie more or less in a chain extending north and south in four main groups, Vavau, Haabai, Namuka and Tongatabu. The third of these contains only a few small islands. The principal islands in the three main groups are Vavau and Hunga in the Vavau group; Haano, Foa, and Lifuka in the Haabai (Haapai) group; and Tongatabu and Eua in the Tongatabu group. Further to the west lies a chain of small isolated islands, including Ata in the far south, and Niuatobutabu, Tafahi, and Niuafou in the far north. The only large islands are Tongatabu (area about 125 square miles), Vavau and Eua. The total land area is about 390 square miles. Tongatabu is about 1,100 miles from Auckland, New Zealand.

(2) SURFACE AND COASTS

Most of the islands are of coral formation, generally small low banks a few feet above sea-level. A few, however, principally the larger ones, rise to a height of several hundred feet, and have a gently undulating surface. The soil is fertile but shallow. The islands are surrounded by extensive coral reefs.

The westerly isolated islands, referred to above, and Eua in the Tongatabu group are mostly volcanic and lofty, but with the exception of Eua they are of small importance. Several of these islands have volcanoes which have been active during the last 20 or 30 years.

Submarine volcanic activity is more or less continuous in the waters of the archipelago, and Falcon Island (20° 19′ south latitude, 175° 25′ west longitude) has appeared and disappeared more than once since 1885. The volcanic islands have usually plenty of fresh water but the coral islands are poorly supplied, and most have concrete storage tanks for rainwater.

(3) CLIMATE

From May to October the weather is fairly cool and dry; from November to April it is hot, moist, and unsettled. The coolest month is July, with a temperature of 71° to 74° F. (21·7° to 23·3° C.); the warmest January, with a temperature of about 80° F. (26·6° C.). The prevailing winds throughout the year are easterly and south-easterly, but from January to March or April there are often violent westerly and north-westerly winds.

The annual rainfall seems to be between 60 and 100 in. (1,500 mm. to 2,500 mm.). January to April are the wettest months and June, July and August the driest.

(4) SANITARY CONDITIONS

The islands are fairly healthy to both natives and whites. There is no malaria, but dysentery and coughs are not uncommon. The chief native diseases are yaws, filariasis, tuberculosis, and whooping cough, the last of which is spreading at an alarming rate.

Hospitals have been established on Tongatabu, Haabai and Vavau, and there are dispensaries on several other islands.

(5) RACE AND LANGUAGE

The natives are Polynesians, a peaceful, pleasure-loving people who have attained a considerable degree of civilization. Their language is allied to Samoan.

(6) Population

At the last census (1911), the population was 23,011; in 1917 it was estimated to be 23,786, principally on the large islands and Niuafou. Some of the volcanic islands are uninhabited.

In 1911 the white population was 380. In 1913 it had grown to 565, of whom 368 were British, 133 German, 45 French and 19 American. There were also 470 natives of other Pacific islands, chiefly Niué Islanders and Samoans.

The principal town and capital is Nukualofa, on the north of Tongatabu. Smaller towns are Neiafu in Vavau and Pangai in Lifuka, each the administrative centre of the group in which it lies.

The birth-rate and death-rate both fluctuate a good deal, but the former always exceeds the latter. In 1914 the birth-rate was 34·6 per 1,000, the death-rate 27·29 per 1,000.

BRITISH LINE ISLANDS

(1) Position and Extent

The name "Line Islands" is generally applied loosely to a number of small islands lying north of the Society Islands and widely scattered a few degrees north and south of the Equator. Of these Manahiki and other islands between the Society Islands and the Union group are considered with the Cook Islands (see above, p. 5). Palmyra Island is now claimed by the United States of America. Washington and Fanning Islands, now part of the Gilbert and Ellice Islands colony, also belong to the Line Islands, but are treated separately p. 15). In the restricted sense employed here the Line Islands include the islands between 11° 30′ south and 2° north latitude, and between 150° and 160° 3′ west longitude, with the exception of Penrhyn Island (see p. 5). These Islands are Malden and Christmas (the two largest), Flint, Caroline, Vostok, Starbuck, and Jarvis. The existence of Victoria Island is doubtful. Their total land area is 20 to 30 square miles.

(2) SURFACE AND COASTS

The islands are all low coral atolls or banks. Caroline Island is a group of 40 islets surrounding a huge lagoon.

The water supply is bad, and most islands have to rely on collected rainwater. Malden Island has capacious storage tanks.

(3) CLIMATE AND SANITARY CONDITIONS

The mean temperature of Malden Island is 83° F. (28·3° C.) throughout the year, and the rainfall averages 24 in. (600 mm.) a year. The first six months of the year are the wettest and the last four the driest. The trade-winds blow steadily from the east and north-east The climate is healthy.

(4) POPULATION

The only inhabitants, mostly on Malden and Flint Islands, are natives of Niué and Aitutaki, in the Cook Islands, imported by the companies leasing the islands for the phosphate trade and copra plantations. The population in 1913 was about 100 natives and six Europeans. Several islands, including Christmas Island, are uninhabited.

PITCAIRN AND ADJACENT ISLANDS

(1) POSITION AND EXTENT

Four islands in the extreme south-east of the Tuamotu Archipelago are British possessions. The principal one is Pitcairn Island, in 25° 4′ south latitude and 130° 6′ west longitude. The other islands are Oeno, 65 miles north-west of Pitcairn; Henderson or Elizabeth, 100 miles east-north-east of Pitcairn; and Ducie, 190 miles east of Henderson. The total area of these islands is about 10 square miles, of which Pitcairn Island occupies a little over 2 square miles.

(2) Surface and Coasts

Ducie and Oeno Islands are low coral atolls, partly awash, with boat passages into the lagoons. Henderson Island is formed of coral limestone elevated to about 100 ft. Pitcairn Island is of volcanic origin, 1,000 ft. high, and almost entirely surrounded by steep cliffs. The soil is porous and fertile, particularly in the valleys. There are no streams, and Pitcairn Island is chiefly dependent on rain for its water supply.

(3) Climate and Sanitary Conditions

The climate is warm, moist, and fairly equable. From October to March the winds are from east-south-east to north; from April to September from east-south-east to south-west. Rainfall on Pitcairn Island is abundant, but on the other islands is scanty.

The natives enjoy good health.

(4) Population

Of these islands, Pitcairn alone is permanently inhabited. Its people are mostly descendants of nine British sailors, mutineers from H.M.S. *Bounty*, and six Tahitian men and twelve Tahitian women, who landed on the island in 1790. English is supplanting a kind of Tahitian-English jargon.

The whole community lives as one family in a village known as Adamstown. In 1856 the population had grown to 193, too great a number for the island to support, and the entire population was removed to Norfolk Island. Within the next eight years, however, a number returned to Pitcairn Island. The population was 125 in 1889, 146 in 1906, and 165 in 1915.

II. POLITICAL HISTORY

Chronological Summary

1567	First (Spanish) discovery of Solomon Islands.
1606	First (Spanish) discovery of New Hebrides.
1643	First (Dutch) discovery of Fiji and Tonga.
1767	First (English) discovery of Gilbert and Ellice Islands.
1797	Beginning of British missionary enterprise in the Pacific.
1838	Annexation of Pitcairn Island.
1874	Annexation of Fiji.
1886	First Anglo-German Convention.
1887	Beginning of Anglo-French Condominium in the New Hebrides.
1892	Gilbert and Ellice Islands Protectorate.
1893	British Solomon Islands Protectorate.
1899	Second Anglo-German Convention.
1900	Tonga Protectorate.

(1) General

The British colonies and protectorates in the Pacific, other than Australia, New Zealand, and their dependencies, are:—

(i) The Crown Colony of Fiji.
(ii) The Crown Colony of the Gilbert and Ellice Islands.
(iii) The Protectorate of the British Solomon Islands.
(iv) The Protectorate of Tonga or the Friendly Islands.
(v) Various outlying small island dependencies.
(vi) The joint Anglo-French Protectorate of the New Hebrides, separately treated in No. 147 of this series.

Early British Policy in the Pacific.—The British settlement in Australia in 1788 was the first permanent European foothold in the Pacific other than the Spanish possessions upon the western side of America. Australia, New Zealand, Norfolk Island, Pitcairn Island, and Lord Howe Island (always connected with New South Wales) seem to have been all that Great Britain possessed in the Pacific prior to the annexation of Fiji. The British Government, though giving promises of friendship and good offices, was at pains not to take responsibility for Pacific Islands. The Hawaiian Islands were annexed by a naval captain in 1843; but the act was at once disclaimed by the home Government. The wishes of the Queen of Tahiti for British protection, expressed in 1825 and 1836, were not complied with; and French protectorates or annexations in the Pacific took place before any similar action was taken by Great Britain, with the exceptions mentioned above.

Traders and Missionaries.—It may be said that prior to 1840 the Pacific Island groups were not definitively protected or controlled by any European Power, although individual Europeans in considerable numbers had intruded into most of them. These Europeans were, roughly speaking, of two classes. There were, on the one hand, traders and "beachcombers"[1] of various nationalities; and, on the other hand, missionaries—British and American Protestants and French Roman Catholics. The traders were British, French, American, and German. At a later date the German traders were absorbed in the great Hamburg firm of Godeffroy and Sons, who began to make their Pacific centre at Samoa about 1857; and in 1880 this firm, then in liquidation, was succeeded by the Deutsche Handels- und Plantagen-Gesellschaft der Südsee-Inseln zu Hamburg.

Protestant missionaries were earlier in the field than Roman Catholics; and the Pacific became a notable theatre of evangelical activity. The first missionaries were sent out by the (London) Missionary Society in 1796; in 1797 they established themselves in Tahiti and (at first for a short time only) in Tonga. They then spread their work in various directions, and were followed by missionaries of particular denominations; Wesleyans being specially prominent in Tonga and Fiji, Presbyterians in the New Hebrides, the Melanesian mission of the Church of England in the New Hebrides and Solomon Islands. Roman Catholic missionaries did not begin work in the Pacific till about 1836. The Pacific Islands thus became the scene of much disorder, arising from the presence among the natives of miscellaneous traders—some of them of the worst type—and rival missions.

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[1] Mostly derelict sailors or escaped convicts.

It was these disorders, and especially those connected with the (so-called) *kanaka*[1] labour traffic, that eventually forced unwilling British statesmen to adopt a forward policy in the South Seas. The scandalous kidnapping of natives in the Pacific islands first attracted the attention of the British Government in 1817; but, despite the regular despatch of vessels of war to patrol these waters, the cruel traffic, though checked, did not cease. At last, in 1872 and 1873, definite steps were taken in Parliament to bring it to an end. In 1874 the Fiji Islands, which had been one of its chief centres, were annexed.

Evolution of British Tenures.—Fiji is British in virtue of formal voluntary cession on October 10, 1874. It was constituted a Crown colony in 1875, and the island of Rotumá was added to the colony in May 1881. The Gilbert and Ellice Islands were placed under British protectorate in May and September 1892 respectively. By the Gilbert and Ellice Islands Order in Council of November 10, 1915, these islands were annexed to His Majesty's dominions and formed into the Gilbert and Ellice Islands colony. By an Order in Council of January 27, 1916, Ocean Island,

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[1] A Hawaiian word signifying "man."

Fanning Island, and Washington Island (the first two annexed in 1900 and 1888 respectively, and the third placed under British protectorate in 1889) were included within the limits of this colony; and by an Order in Council of February 29, 1916, the Union Islands, three in number and placed under British protectorate in 1889, were also included. The Protectorate of the British Solomon Islands, following on arrangements with Germany, to which further reference will be made, dates from 1893 and 1900; the Protectorate of Tonga from 1900; and various dates must be assigned to the miscellaneous small islands which Great Britain owns or protects in the Pacific, the earliest being Pitcairn Island, settled by the mutineers of the *Bounty* in 1790, and formally placed under the British flag in 1838.

Anglo-German Pacific Agreements.—With regard to the island groups, other than the New Hebrides, Great Britain has been brought more into contact with Germany than with France. German commercial penetration in the Pacific was followed in 1884 by political action and the declaration of German protectorates;[1] the acquisition of German New Guinea, in particular, arousing intense resentment in Australia against what was regarded as the supineness of the Home Government.

The Convention of 1886.—On April 6, 1886, the British and German Governments made a joint declaration, "Relating to the Demarcation of the British and "German Spheres of Influence in the Western "Pacific."[2] The Western Pacific was defined as

> "that part of the Pacific Ocean lying between the 15th parallel of north latitude and the 30th parallel of south latitude, and between the 165th meridian of longitude west and the 130th meridian of longitude east of Greenwich."

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[1] See *Historical Geography of the British Colonies*, vol. vi, *Australasia*, by J. D. Rogers, 1907, pp. 262, etc., and *The New Pacific*, by C. Brunsdon Fletcher, 1917.

[2] P.P.C.-4656, May 1886, containing a map. See *Former German Possessions in Oceania*, No. 146 of this series, p. 89 *et seq.*

Within these limits a conventional line was drawn, the British sphere being to the east, south-east, and south of the line, and the German to the west, north-west, and north. Each Power bound itself not to acquire territory, accept protectorates, or interfere with the extension of the other's influence, and to give up any territory or protectorate already acquired within the sphere of influence thus assigned to the other. But there were exceptions, viz., Samoa, as being affected by treaties with Great Britain, Germany, and the United States; Tonga, as being affected by treaties with Great Britain and Germany; and the island of Niué (Savage Island). These islands were to remain neutral; and islands in the Western Pacific owned or protected by another civilized Power were also necessarily excepted. This Agreement was supplemented on April 10, 1886, by a Joint Declaration, providing for reciprocal freedom of trade in the British and German possessions and protectorates in the Western Pacific.[1]

The Convention of 1899.—In 1899[2] the arrangement arrived at in 1886 was modified. Samoa had been under the joint control of Great Britain, Germany, and the United States, with the result that, as was stated in the preamble to the Anglo-German Convention of November 14, 1899, representatives of the three Powers had reported that

> " it would be impossible effectually to remedy the troubles and difficulties under which the islands of Samoa are at present suffering as long as they are placed under the joint administration of the three Governments."

Samoa, in short, displayed all the drawbacks of a condominium. Accordingly, under the new Convention, Great Britain withdrew altogether from the Samoan group, in favour of Germany in some islands of the group, of the United States in others; while Germany withdrew altogether, in favour of Great Britain. from the Tonga group and Savage Island, and ceded to Great Britain those of the Solomon Islands east and south-east of the island of Bougainville, which, under the 1886 Agreement, had been in the German sphere. Reciprocal freedom of trade in the Western Pacific was continued as before.

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[1] Also in C.-4656-86.

[2] *Cf. Former German Possessions in Oceania*, No. 146 of this series, pp. 20-23, and 93.

(2) Fiji

Early History and Annexation.—Early in the nineteenth century Australian traders were attracted to Fiji by its sandalwood; and it gradually became the resort of a motley group of white men, as well as a field of mission work. Under pressure of certain American claims, the so-called King of Fiji, Thakombau, in October 1858 formally ceded the sovereignty of the islands to Queen Victoria. The offer reached England early in the following year; a Special Commissioner was sent to Fiji, who reported in 1861; and, guided by his advice, the British Government in 1862 declined the offer.[1] From this date onward confusion in Fiji became worse confounded. The number of white residents increased, partly owing to the stimulus given to cotton-growing by the American Civil War; and in 1871 they were estimated at about 2,000. In 1869 there was a petition, which came to nothing, for an American protectorate coupled with local self-government. In 1870 Thakombau granted a charter to the European community at Levuka to form a kind of self-governing corporation. In the same year an inter-colonial conference in Australia pressed for a British protectorate over the islands; but in March 1871 the British Government again declined. Later in the year, however, the Governor of New South Wales was informed that, if that colony would be responsible for providing for the government of Fiji, the Imperial Government would entertain a proposal for annexing the islands to New South Wales. This suggestion did not accord with the views of the New South Wales Government.

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[1] Correspondence relating to the Fiji Islands, May 1862.

About the same date a kind of limited monarchy had been established in Fiji, white men being constituted, or constituting themselves, Thakombau's Ministers, with not unchallenged authority; Mr. (afterwards Sir John) Thurston became Chief Secretary. Various considerations were by this time inclining the British Government to take action—pressure from Australia, danger of being forestalled by the United States or Germany, and the abuses of the Labour Traffic, which in June 1872 produced a special Act of Parliament: "*For the* "*Prevention and Punishment of Criminal Outrages* "*upon Natives of the Islands in the Pacific Ocean,*" with the short title of *The Kidnapping Act*, 1872.[1] Accordingly, when in January 1873 Thurston enquired whether a renewed offer of cession would be entertained, two Commissioners were sent to the islands again to enquire and to report. On April 1874 they reported strongly in favour of annexation. Thakombau's advisers attached certain conditions to the proposed cession; but Sir Hercules Robinson (afterwards Lord Rosmead), then Governor of New South Wales, was deputed to visit Fiji, with full discretion to act, provided only that the cession should be wholly unconditional. On these terms the formal cession took place, on October 10, 1874; and in 1875 Fiji was definitely constituted a Crown colony.

(3) THE GILBERT AND ELLICE ISLANDS COLONY

The British protectorate of the Gilbert and Ellice Islands dates from 1892, subsequently to the first Anglo-German Agreement. Ocean Island, which lies apart, west of the Gilbert group, was included within the jurisdiction of the Resident Commissioner of the Gilbert and Ellice Islands by a High Commissioner's

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[1] 35 and 36 Vict., cap. 19.

Proclamation of November 28, 1900. The history of the formation of the Gilbert and Ellice Islands colony, and of the annexation of the various islands composing it, will be found on pp. 29-30.

(4) THE TONGA ISLANDS PROTECTORATE

The British protectorate over the Tonga group followed upon the second Anglo-German Agreement. Wesleyan mission influence became paramount in Tonga in the middle of the nineteenth century; and under missionary auspices a kind of Constitution was established, the Prime Minister prior to 1890 being Mr. Shirley Baker, an ex-Wesleyan missionary (the subject of Mr. (now Sir) Basil Thomson's book, *The Diversions of a Prime Minister*), who had to be removed by order of the High Commissioner. There had been a treaty of friendship between Great Britain and Tonga, dated November 29, 1879, which was ratified on November 8, 1881, and amended on June 2, 1891. After Germany had, by the 1899 Convention, abandoned all her rights or claims in or over Tonga, a new treaty of friendship was concluded between Great Britain and Tonga on May 18, 1900, which was ratified on February 16, 1901. This treaty formally established British protection, and provided for the appointment of a British Agent and Consul to reside in Tonga and to be "the authorised "medium of communication between His Majesty's "Government and the Government of Tonga."[1] The protectorate was proclaimed on May 19, 1900, the day following the execution of the treaty.

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[1] These treaties will be found in *The Law of the Government of Tonga*, 1907.

III. SOCIAL AND POLITICAL CONDITIONS

(1) General

The Governor of Fiji has almost from the first acted, though with increasing difficulty as the amount of work increased, as High Commissioner for, or Governor of, the island groups in the Western Pacific (other than Fiji) which are under British protectorate or are British territory; he also controls certain outlying islands. The office of High Commissioner for the Western Pacific was created by the Western Pacific Order in Council of 1877, passed under the Pacific Islanders Protection Acts of 1872 and 1875 and the Foreign Jurisdiction Acts. There have been various amending Orders in Council, but the principal Order still in force is the Pacific Order in Council, 1893. The High Commissioner's powers with regard to the New Hebrides (which are dealt with in No. 147 of this series) are defined by an Order in Council of November 2, 1907, following upon the Anglo-French Convention of October 20, 1906.

(2) Fiji

Fiji, whose capital was moved in 1882 from Levuka, in the island of Ovalau, to Suva, in Viti Levu, the largest island in the group, is a Crown colony, but not of the strictest type. There are two nominated unofficial members in the Executive Council, at present chosen from among the elected members of the Legislative Council: and the Legislative Council includes seven elected and two native members, in addition to (at the present time) eleven official members, exclusive of the Governor, and one nominated unofficial member.

The revenue in normal times shows a steady increase, and the colony is fully self-supporting. In ordinary municipal and judicial features Fiji is in line with other Crown colonies; but special provision has from the first been made for native administration and the safeguarding of native rights, the services of the chiefs and headmen being extensively used.

Primary village schools are mainly in the hands of the missionary bodies. There are two Government schools for the higher education of selected native boys. Suva and Levuka have municipal schools and school boards. At the 1911 census the natives were all returned as Christians; 85 per cent. of them as Methodists.

(3) The Gilbert and Ellice Islands Colony

The colony is administered by a Resident Commissioner acting under the instructions of the High Commissioner for the Western Pacific; and the High Commissioner, by the Order in Council of November 10, 1915, which annexed the Gilbert and Ellice groups, is empowered to make ordinances for the colony.

The natives are reported to have the utmost confidence in British rule, and also to have considerable capacity for self-government, the integrity of their native Assemblies having been guaranteed when the British protectorate was first proclaimed. They are of Polynesian race, but the type varies in the different groups.

Education is in the hands of the missionary bodies—Protestant missions of London and Boston, and the Roman Catholic mission of the Sacred Heart.

(4) The British Solomon Islands

In size, population, and possibilities the British Solomon Islands are, next to Fiji, the most important of the British Pacific groups. They are still the least developed, the natives being of a fiercer type than in most of the Pacific Islands, and having had good cause to be suspicious of white men from experience of kidnapping. But their development has recently been marked and rapid.

The islands are administered by a Resident Commissioner, acting under the authority and control of the High Commissioner for the Western Pacific; and the High Commissioner legislates for the islands in the form of regulations under the Pacific Order in Council.

While the number of white men is increasing, the native population is stated to be decreasing through disease and inter-tribal fighting. They are a Melanesian race, still largely in a state of barbarism. A report, written in August 1915, stated that " some years must " elapse before complete control of the natives can be " brought about ";[1] and missionary efforts—the missionaries being mainly of the Melanesian Mission of the Church of England and Roman Catholics—have not as yet made Christianity dominant in the islands.

The two northernmost islands, Bougainville (the largest of the group) and Buka, were under German rule.

(5) The Tonga Islands Protectorate

The Tonga Islands Protectorate is based upon a definitive treaty with a recognised native authority—the King of Tonga; and the British Agent and Consul, who acts under the instructions of the High Commissioner, but who is not styled, as in other island groups, Resident Commissioner, is bound not to " interfere in " any way with the internal affairs and administration " in matters where the interests of British subjects " or foreigners are not concerned." This exemption from British control in ordinary home matters has been the cause of no little friction and difficulty, and has not made for good government.

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[1] Report for 1914-15, No. 869, November 1915, p. 7.

The Constitution of Tonga is a limited monarchy. There is a Legislative Assembly, which was reformed at the end of 1914, so as to consist of 21 members in all, including 7 nobles elected by their peers, 7 elective representatives of the people, and 7 Ministers of the Crown. It meets annually. The previous Assembly comprised about 70 members, and, as a rule, met only once in three years.

The Tongans are a branch of the Polynesian race, more advanced in civilisation than almost any other Pacific Islanders. They are all Christians; and nine-tenths are Wesleyans, mainly belonging to "The Free Church of Tonga." The non-Wesleyans are nearly all Roman Catholics.

They are almost all able to read and write. Elementary education is given in Government primary schools —at the end of 1914 fifty-seven in number; and there is a Tonga College for higher education, in which prominence is given to the teaching of English.

(6) MISCELLANEOUS DEPENDENCIES

There is a large number of miscellaneous small islands in the Pacific, which have become British in various ways—by settlement, annexation, protectorate, or the issue of leases or licences for, e.g., the copra industry or the collection of guano. Some are, many are not, within the jurisdiction of the High Commissioner for the Western Pacific.

Of the islands not under the jurisdiction of the High Commissioner, Norfolk Island and the Bird and Cato Islands are administered by the Commonwealth of Australia; Lord Howe Island by the State of New South Wales; the Cook Islands, Palmerston, Penrhyn. Suvarov, and Chatham Islands by the Dominion of New Zealand. Christmas, Fanning, and Penrhyn Islands were annexed to form stations for the purpose of laying the cable between Australia and Canada, but only Fanning is in actual occupation as such.

GENERAL OBSERVATIONS

Apart from the worth of Fiji as a most flourishing, healthy, and contented tropical dependency of Great Britain, Suva has a constantly growing value as a central harbour in the Pacific, a coal depot, a port of call for the ships plying between Canada and Australasia, and a station for the all-British submarine Pacific cable. There is every indication that the islands must grow in importance as Pacific trade is more and more developed; and the loyalty and patriotism of both white men and natives under British rule have been illustrated by the fighting and labour contingents which have been sent to the war in Europe.

IV. ECONOMIC CONDITIONS

I. DEPENDENCY OF THE STATE OF NEW SOUTH WALES

LORD HOWE ISLAND

(A) MEANS OF COMMUNICATION

Anchorages and Shipping

THERE are fair anchorages in moderate depth, but on account of foul ground and violent shifting gales, it is necessary to anchor according to the wind.

A five-weekly steamship service is provided by Burns, Philp & Co., under Government contract.

(B) INDUSTRY

Products and Land Tenure

The soil is rich and suitable for any sub-tropical vegetation. Potatoes and onions are a staple export, but the area of cultivable land is so small (only about 300 acres out of a total area of 3,220) that the only trade worth pushing is that in the Kentia palm. This palm is indigenous to the island, and will not, it seems, mature elsewhere. The seeds are bought by horticulturists for decorative purposes; about 2,000 bushels, at 45 to 55 shillings a bushel, are exported annually.

The inhabitants breed a few pigs, milch cattle, and goats. Fish are plentiful in the neighbouring waters.

All land is the property of the State. The people occupy it on sufferance, the Government reserving the right of resumption when it thinks fit.

II. DEPENDENCY OF THE COMMONWEALTH OF AUSTRALIA

NORFOLK ISLAND

(A) MEANS OF COMMUNICATION

(1) *Roads*

There is a good road system throughout the island, maintained by the Government. In 1915 the length of roads was about 40 miles.

(2) *Ports*

There is no sheltered anchorage, and landing is so difficult that steamers have sometimes been compelled to leave without unloading their mails. The two recognised places of landing are at *Kingston*, in Sydney Bay, on the south coast, and at *Cascade Bay* on the north. In both these cases ships have to lie half a mile out. At Kingston there is an opening in the reef. There is a small boat harbour with a stone wharf, and a pier with a hand-power derrick crane, lifting 3 tons. The surf is very heavy in south and south-westerly winds. At Cascade Bay there is a new concrete pier, with a line of steel rails to carry a travelling crane. In northerly winds landing is impracticable. A third jetty is to be erected in Ball Bay on the east coast.

It would be possible to construct a breakwater between Nepean Island and the mainland east of Sydney Bay, but the outlay would be considerable and would not be justifiable unless it were certain that the island is necessary as a coaling station for the Commonwealth.

(3) *Shipping Lines*

A steamer of Burns, Philp & Co. brings the mails from Sydney once in five weeks on its way to the New Hebrides and touches again at Norfolk Island on its return voyage. The missionary steamer "Southern Cross" conveys mails to Auckland twice a year.

(4) *Telegraphic and Wireless Communications*

The Pacific Cable Board has a station at Anson Bay on the north-west coast, where the "all red" cable from Great Britain *via* Vancouver and Fiji bifurcates, one branch going to New Zealand, the other to the Queensland coast.

The erection of a wireless station is under the consideration of the Commonwealth Navy Board.

(B) INDUSTRY

(1) AGRICULTURE

Nearly the whole population of Norfolk Island is engaged in some form of agriculture. It is estimated that there are in the island 8,528 acres, of which 443 were under cultivation in 1914. In 1916 the amount of arable land had diminished to 259 acres.

(*a*) *Products of Commercial Value*

Cereals.—Maize is the chief crop; wheat and oats come next. It is reported that the local demand for grain is not sufficient to make its cultivation remunerative and there is a tendency amongst the inhabitants to replace such crops by fruit trees. Thus the area under maize diminished from 99 acres in 1914 to 69 in 1916, that under wheat and oats from 36 acres in 1914 to 10 in 1915.

Other Foodstuffs.—The cultivation of *kumaras* (sweet potatoes), potatoes, and yams tends to increase: these products are chiefly for local consumption. Coffee is grown, and is of good quality, but it suffers from primitive methods of cultivation. The same may be said of arrowroot.

Fruit.—The lemon industry is by far the most important and profitable in the island, and is being rapidly extended. In 1916 there were exported 901 casks of lemon juice and 1,121 casks of peel, and in the same year an additional factory for preserving lemon peel was erected. Oranges of exceptional size and quality, bananas, passion fruit, guavas, and pineapples also flourish.

Live-stock.—At the end of 1915 there were in the island 713 horses, 1,637 cattle, 817 sheep, and 116 pigs, besides a considerable number of turkeys and poultry. A certain amount of hides, horsehair, and wool is exported to the Commonwealth.

(*b*) *Methods of Cultivation*

The island suffers from drought and from the slackness and conservatism of the inhabitants. The Melanesian Mission estate stands almost alone in the matter of progress. The Agricultural Department of the Commonwealth is now interesting itself in the island; it sends seeds and fertilizers, establishes demonstration plots, and tries to inculcate scientific agricultural methods.

(*c*) *Forestry*

The chief timber is afforded by the Norfolk Island pine (*Araucaria excelsis*) and the ironwood tree (*Olea apetala*), the former being used for building, the latter for fencing, piles, &c. The white oak flourishes; the wattle and eucalyptus have been introduced. The Government has now taken in hand a system of reafforestation and has established forest reserves at Rocky Point.

(*d*) *Land Tenure*

Of the 8,528 acres in the island, 5,426 were returned in 1916 as "alienated," 967 as reserves, 974 as Crown leases, 856 as available for Crown leases, the remainder as roads, &c. The alienated lands chiefly represent free grants to the original Pitcairners. Since 1896 the system adopted has been to grant leases up to 25 years of not more than 25 acres, with tenant right in improvements, at small rents, usually 2½ per cent. on the capital value of the land.

(2) FISHERIES

The waters round Norfolk Island abound in fish, especially in the edible trumpeter and the schnapper. The Pacific Fisheries and Trading Company, a new concern, has recently erected a freezing chamber and is arranging for the export of frozen and smoked fish.

Schools of whales, chiefly humpback, but occasionally sperm, visit the island every year. The whaling industry has decayed of late, partly owing to the fall in the price of whale oil. The industry is capable of revival and could be made very profitable if up-to-date methods were pursued and a steam tug were provided.

(C) COMMERCE

(1) *Exports*

The values of the exports from 1913–14 to 1916–17 were as follows:—

	£
1913–14	1,193
1914–15	4,000
1915–16	6,171
1916–17	8,799

Of the chief exports in 1914-15, lemon juice amounted in value to £1,795, passion fruit and pulp to £810, lemon peel to £438, and hides to £256. Other articles exported were coffee, oranges, *kumaras* (sweet potatoes) and potatoes, onions, horsehair, wool, and a little arrowroot.

Almost the whole of the exports go to the Commonwealth, where they are admitted duty free. Only a very small quantity goes to New Zealand (value in 1912, £166, in 1913, £197). With better shipping facilities and better harbour accommodation, combined with improved methods of cultivation, the exports, especially of fruit, could be considerably increased.

(2) *Imports*

The values of the imports from 1913-14 to 1916-17 were as follows:--

	£
1913–14	9,167
1914–15	12,119
1915–16	14,462
1916–17	16,694

The imports are almost wholly articles for domestic use, but details are not available. Of the total value of the imports in 1914-15, New South Wales contributed £10,679, New Zealand £554, and the United Kingdom £886.

(D) FINANCE

The revenue is almost wholly derived from import duties on ale, wines and spirits, tobacco, oil, and confectionery.

The currency is that of the Commonwealth. There are no banking facilities, and owing to the deficiency of cash in the island a complicated system of barter is in operation.

III. DEPENDENCIES OF THE DOMINION OF NEW ZEALAND

The islands immediately adjacent to New Zealand, of which the chief are the Chatham Islands, deserve only a passing notice. Richer and more important are the Cook and Hervey Islands, which will be described in detail. The list of dependencies of New Zealand is completed by Niué or Savage Island, which is administered separately from the Cook group.

CHATHAM ISLANDS AND OTHERS ADJACENT TO NEW ZEALAND

Chatham Islands

At Whangaroa, or Port Hutt, there is an excellent harbour, sheltered from all winds. The islands have steamship communications at fairly regular intervals.

There is a wireless station on Chatham Island.

About one-third of the area is covered with forests, and the greater part of the remainder with grass and fern. The main occupations of the inhabitants are sheep-grazing and fishing. Wheat is cultivated, also English fruit and vegetables.

Auckland Island

There are several good harbours, that of Port Ross having been described as "one of the best harbours of refuge in the known world."

Sheep-rearing has been started on this island.

Campbell Island, Bounty Island, and the Antipodes Group

Campbell Island has two good harbours, and is used as a whaling station. It is uninhabited, as are Bounty Island (on which the fur seal still exists) and the Antipodes group. On nearly all these islands Government depots are established.

Kermadec Islands

Of these four islands, lying about half-way between New Zealand and the Tonga Islands, Raoul or Sunday Island is the chief. There are no harbours in the group. It is possible, however, to anchor off Raoul

Island, the side chosen depending on the wind; the best landing is on the north.

Several attempts have been made to form a settlement, but they have all failed, and the islands are at present uninhabited. The soil is naturally fertile, but there is little water. Some years ago, orange and lemon plantations were formed and bananas planted, but the want of shipping facilities caused this industry to be abandoned. Cattle and sheep were also raised, and some of the forests cleared for sheep-runs.

COOK AND HERVEY ISLANDS WITH NIUE OR SAVAGE ISLAND

(A) MEANS OF COMMUNICATION

Cook and Hervey Islands

(1) *Roads*

The absence of a proper road system has long been a hindrance to the development of these islands, and has prevented the opening up of the interior, where there is rich land pre-eminently suitable for growing bananas. The roads were formerly constructed and maintained by the natives under the corvée system. Recently the administration has taken them over, and has already effected great improvements.

(2) *Telephones*

A telephone system has been inaugurated at Avarua and will be extended to the neighbouring villages.

(3) *Ports*

The only two islands which are favourably situated for trade are Rarotonga and Aitutaki, which alone have boat passages through the reefs; on the fertile islands of Mangaia, Mauke and Atiu it is almost impossible even to land, except under favourable circumstances.

The chief port of Rarotonga is at Avarua, on the north side, where there is safe anchorage in 10 to 15 fathoms outside the reefs. There is a good boat passage into the harbour, which has a pier with a tramway and storehouses. There are also a pier and moorings for small vessels in the safe but confined harbour of Avatiu. At Ngatangua, on the east side of the island, there is also a small harbour, where small vessels are built.

There is no good anchorage off the two Hervey Islands, Manuai and Te Au-o-Tu.

(4) *Shipping Lines*

Communication with the islands is maintained by the ships of the Union Steamship Company, of New Zealand, which touch at the Cook Islands monthly on their way between Auckland and San Francisco. Better and more frequent means of communication are, however, urgently needed if the fruit trade with New Zealand and elsewhere is to be properly developed. At present, it is almost impossible to ensure that the fruit shall arrive at its destination in good condition.

(5) *Telegraphic and Wireless Communications*

There is no cable connection. According to the report for 1917 a wireless station was to be erected at Avarua, with subsidiary stations on the fruit-exporting islands of Mangaia, Mauki and Atiu.

Penrhyn or Tongareva Island

There is a good road system on this island.

Hitherto ships have had to anchor outside the lagoon, but a passage is now being made which will give a depth of 3 fathoms at low tide, and will afford accommodation inside to large vessels. The strong currents are, however, dangerous. The existing wharf is being enlarged. There are large storage tanks.

Suvarov Island

This island, or rather group of islands round a lagoon, has one of the best harbours in the Pacific. There is a good entrance to the lagoon, with a depth of 4½ fathoms. On the west side of Anchorage Island there is a pier at which small boats can be loaded with copra and pearl shell. The southern part of the lagoon is reserved by the Admiralty, and it has been suggested by Lord Ranfurly that a coaling station should be created. The island has the additional advantage of being outside the hurricane track.

Palmerston Island

There is no harbour. There is a boat passage into the lagoon and fair anchorage outside.

Pukapuka or Danger Islands

These islands lie outside the hurricane track, but they have no anchorage, and landing on them is almost impossible.

Nassau Island

The anchorage off this island is bad, and landing is difficult.

Manahiki Island

There is no safe anchorage off this island at any time. It has communication with Tonga about five times a year by schooner or mission steamer.

Rakahanga Island

There is poor anchorage and bad landing.

Niué or Savage Island

The island has a good road system. All the villages are connected by roads, usually 16 ft. in width.

There is a fair anchorage in Alofi bay and a boat passage through the reef to Alofi, the seat of administration, where there is a wharf.

A subsidized schooner makes a voyage six times a year, starting from Auckland. But a far better steamship service is absolutely necessary for the development of the fruit trade in Niué, especially the trade in bananas. Better landing facilities are also necessary.

(B) INDUSTRY

Cook and Hervey Islands

(1) LABOUR

The labour problem has not hitherto been so acute as in other Pacific groups, though most of the islands could support a larger population than they possess. The number of Europeans in Rarotonga engaged in planting was in 1917 not more than 12, and it is reported that it is becoming increasingly difficult for settlers to obtain leases of land. The tendency of wages in Rarotonga is to increase, and this inducement, together with the fact that there is a picture-palace on the island, serves to attract natives to Rarotonga, to the detriment of the other islands.

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

Apart from the growing of foodstuffs such as *kumaras* and *taro* for home consumption, the sole occupations of the people are the preparation of copra and the growing of fruit and vegetables for the New Zealand market. The latter industry might be greatly developed.

Coffee of excellent quality is grown at Mangaia Island and elsewhere.

Copra.—The supply of copra and coconuts could be largely increased. In 1902 it was calculated that with proper care the production of copra in the dependencies of New Zealand could be raised from 2,000 to 10,000 tons per year. The islands of Manuai and Te Au-o-Tu, which were leased for 25 years in 1898 to the Cook Islands Trading Company, supply a considerable amount of copra.

Fruit and Vegetables.—The soil is admirably suited for *bananas*, which form the crop next in importance to coconuts, but there is a tendency to abandon their cultivation in favour of the more profitable vegetable industry. The cultivation of *tomatoes* has greatly developed of recent years, and is at present the most promising industry. *Oranges* and *pineapples* are exported in considerable quantities. Almost all kinds of tropical and semi-tropical fruits could be grown, such as the lemon, the lime, the kumquat, the honey mango, the custard apple, and, if the swamps were drained, the papaw.

Vanilla, *arrowroot* and *candlenuts* flourish, though they do not yet figure in the list of exports.

A *live-stock* department was formed a few years ago, but the experiment proved a failure, and the stock was disposed of. There are a few horses and cattle at Rarotonga, and pigs and poultry on all of the islands.

There is plenty of *bêche-de-mer* in the lagoon of Aitutaki.

(*b*) *Methods of Cultivation*

In Rarotonga an ordinance has lately been passed requiring all native planters to clear and plant their own uncultivated lands.

A simple system of irrigation, which could be inaugurated at small expense, is much needed. Better methods of cultivation are necessary, especially in the plantations of lime-trees and coffee. The Government has at Pua-au on Rarotonga an experimental nursery in which specimen trees, &c., are grown, and demonstrations in pruning and the use of fertilizers are given. In view of the fact that 90 per cent. of the native boys are destined to become planters, an agricultural class has been opened, and scholarships are offered tenable at New Zealand schools.

(c) *Land Tenure*

All the land belongs to the natives, who may not alienate their holdings. No lease may be made for more than 60 years. The chief difficulty regarding leases has been insecurity of title, but a Native Land Court now deals with this question. An increase in the number of European settlers is urgently needed for the proper development of the islands, but, as has been said above, such settlers find it more and more difficult to lease land.

(3) MANUFACTURE

An effort is being made to revive the hat-making industry. The Panama plant has been introduced, and it is hoped that this will be acclimatised.

Penrhyn or Tongareva Island

Coconuts and bananas are grown, and the export of copra amounts to some 100 tons a year.

The island is noted chiefly for its pearl shell. The export (as also that of copra) has lately fallen off, now amounting to under 30 tons per annum, the value being from £100 to £200 a ton.

Suvarov Island

This island is at present uninhabited, but its soil is fertile, and it should be able to support a small population, especially if adequate water storage were provided. " As a depôt for the collection of trade from the various islands, it should in time be valuable."

At present its chief value arises from its pearl shell beds. It is estimated that one machine alone could obtain 40 to 45 tons a year. The island was originally leased to Lever Brothers, who were developing this industry. The New Zealand Government has now leased it to Captain Harries of Rarotonga.

Palmerston Island

The soil is fertile and a certain amount of copra is produced. There is no pearl shell at present, but it would be possible to introduce spawn.

Pukapuka or Danger Islands

A fair amount of copra and pearl shell is obtained.

Nassau Island

The island is fertile and could be developed. It produces coconuts, bananas, bread-fruit, *taro* and limes. It is leased to the Samoan Shipping and Trading Company.

Manahiki Island

The island produces a poor quality of copra (135 tons in 1902) and *bêche-de-mer*. Its chief value, however, lies in its pearl shell deposits, which are of vast extent.

Rakahanga Island

The export of copra in 1902 was 160 tons. There appears to be no pearl shell.

Niué or Savage Island

(1) LABOUR

Although there is plenty of undeveloped land in Niué Island itself, no difficulty is experienced in recruiting natives from it for work in Tonga and on Malden Island. " There is no hope," wrote the Resident Commissioner a few years ago, " of increasing the production of the island so long as it is the labour market for the Pacific." This emigration is ascribed by Sir Basil Thomson to travellers' stories. "The young men return with fascinating tales of the emancipation of foreign lands, where men get drunk and swear and break the Sabbath with impunity."

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

In 1904 it was calculated that only 20 per cent. of the land was under cultivation. A further 15 per cent. was too rocky, but the remaining waste was suitable for cultivation.

At present nearly all the cultivated land, apart from that under yams, *kumaras*, and *taro*, is under coconuts. The island is, however, capable of producing many other valuable crops. It would be possible to build up a fruit trade. Arrowroot, coffee, and vanilla grow well, and experiments in cotton-growing have proved successful.

(*b*) *Forestry*

There is a great deal of valuable timber, including some ebony and other hard woods, but the present difficulties of transit make it doubtful whether felling would be profitable.

(*c*) *Land Tenure*

The land is all the property of the natives, who are described as suspicious and avaricious. The progress of the island depends to a great extent on the initiation of a system of leases. The question of title appears to be unusually complicated, and leads to endless dispute and robbery.

(3) MANUFACTURE

The natives are expert straw-plaiters, and the manufacture of hats, both for domestic use and for export, is the chief industry.

(C) COMMERCE

Cook and Hervey Islands

(1) *Exports*

The exports from the Cook and Hervey Islands consist almost wholly of fruit, copra, vegetables, and pearl shell. The following table shows the values of the exports in the years 1911-14 :—

	1911.	1912.	1913.	1914.
	£	£	£	£
Bananas	24,907	33,200	35,700	28,939
Coconuts..	2,952	2,881	2,893	2,779
Coffee	430	1,950	970	877
Copra	31,151	26,276	33,679	14,630
Kumaras and *taro*.. ..	—	—	510	145
Oranges	19,922	16,060	16,852	18,790
Pearl shell .. .	150	10,520	8,280	1,350
Pineapples	239	501	270	460
Tomatoes	—	—	—	600
Miscellaneous	11,325	10,320	10,772	8,942
Total	91,076	101,708	109,926	77,512

In 1913 the United Kingdom took the whole of the pearl shell and 66·6 per cent. of the copra; the United States took 33·3 per cent. of the copra and 83·3 per cent. of the coconuts. The remainder of the products, amounting to 60 per cent. of the whole, went to New Zealand. Since the annexation of the islands by New Zealand, their products have been admitted into the Dominion duty free.

(2) *Imports*

The imports consist mainly of foodstuffs and clothing. The following table shows their values in the years 1911-14:—

	1911.	1912.	1913.	1914.
	£	£	£	£
Apparel and drapery ..	3,816	4,174	3,395	2,422
Biscuits	3,832	4,313	4,967	5,133
Cotton piece-goods ..	7,535	6,142	8,388	7,213
Flour	3,748	3,441	4,247	4,036

	1911.	1912.	1913.	1914.
	£	£	£	£
Hardware	2,044	2,301	2,999	2,048
Meats	5,197	8,188	9,427	9,161
Provisions	1,927	2,614	4,968	2,423
Sugar	2,326	7,916	2,910	3,446
Miscellaneous	59,198	54,723	68,982	55,250
Total	89,623	93,812	110,283	91,132

The following return shows the sources from which the imports came:—

	1911.	1912.	1913.	1914.
	£	£	£	£
New Zealand	66,787	73,704	83,096	64,852
United Kingdom	8,244	7,526	9,888	10,994
United States of America ..	7,654	5,623	9,846	10,586
Tahiti	3,379	3,002	3,244	1,490
New South Wales.. ..	1,757	1,603	2,754	1,792
Germany	608	1,081	148	65
Japan	453	288	141	245
Victoria	224	281	185	184
France	238	24	33	43
Other countries	279	680	948	881

It will be noticed that in 1913 about 75 per cent. came from New Zealand. The United Kingdom and the United States came next, with about 10 per cent. each, the former supplying about 50 per cent. of the cotton piece-goods, the latter about 60 per cent. of the flour, oils, and rice. Germany's trade was still only small; it consisted of fancy goods, hardware, and matches.

Niué or Savage Island

(1) *Exports*

The exports in 1915 amounted to £8,130; in 1916 to £3,179. They consist chiefly of copra, which amounted in value in 1915 to £4,774, and in 1916 to £1,196; edible fungus, whose value in 1916 was £1,297; and hats, which amounted in value to £2,957 in 1915, and to £600 in 1916.

All the exports went to New Zealand,[1] where they are admitted duty free.

(2) *Imports*

In 1915 the imports amounted in value to £9,678; in 1916 to £9,512. They include necessaries, such as axes, knives, umbrellas, looking-glasses, prints and sewing-machines, and luxuries, especially pipes, plug tobacco, and cheap scents. In 1916 New Zealand provided goods to the value of £8,934, and Australia goods to the value of £449. In 1913, out of a total of £13,761, the imports from German Samoa were worth £844, and those from Germany itself £196, consisting chiefly of drapery, silks, and matches.

(D) FINANCE

Cook and Hervey Islands

(1) *Public Finance*

The revenue and expenditure of the Cook and Hervey Islands from 1913 to 1917 were as follows:—

Year.	Revenue.	Expenditure.
	£	£
1912–13	9,420	11,508
1913–14	11,723	10,194
1914–15 . ..	10,118	10,617
1915–16	7,673	9,081
1916–17 .. .	9,710	8,586

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[1] Where reference is made to dates subsequent to 1914, German Samoa is reckoned as part of New Zealand. It formerly took about one-third of the exports of Niué.

In 1916–17 the chief heads of revenue were Customs duties, value £5,716; fruit export tax, value £932; and postage stamps, value £711. The people may be said to live practically tax free, except for Customs duties, and even from those produce intended for New Zealand is exempt.

(2) *Currency and Banking*

The currency is that of the Dominion. There is a Government Savings Bank. The deposits made in 1916 amounted to £2,081, and the withdrawals to £760.

Niué or Savage Island

The revenue of Niué in 1916 amounted to £2,067, and the expenditure to £1,747. The revenue was derived from Customs (£1,247), licences, and fees.

IV. THE SOLOMON ISLANDS PROTECTORATE

SOLOMON ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

The road system of the Protectorate is undeveloped. Except in the immediate vicinity of the administrative headquarters, internal communications consist chiefly of native tracks. The Germans ran a road right round the island of Bougainville, with branches inland where necessary. It is probable that a similar system will one day be possible in most of the British Solomon Islands.

(2) *Rivers*

The large islands have many streams, most of which have navigable stretches, especially those on the north of Guadalcanal.

(3) *Ports*

There are three ports of entry in the Protectorate, namely, Tulagi, on the south coast of Florida; Gizo, in the New Georgia group; and Shortland Harbour, on the small island of that name in the straits which separate Choiseul from Bougainville.

Tulagi is the most important of these. It is the seat of the Resident Commissioner, and the chief port of call. There is secure anchorage in 19 to 21 fathoms, a landing pier, and a slip capable of taking small vessels up to 100 ft. in length.

Gizo is one of the best harbours in the Protectorate, and the island is one of the healthiest of the group. It has a Government station, residency, &c.

Shortland Harbour has a residency and a pier.

Besides the ports of entry, the Protectorate has a large number of good harbours, many of which have not yet been adequately surveyed. The more important are *Star Harbour*, in San Cristoval, which gives excellent shelter in all seasons; *Makira Bay*, in Maoraha Island, described as one of the best and safest harbours in the group; *Royalist Harbour* on the west and *Port Diamond* on the east coast of Malaita; *Gavuta*, on the coast of Florida, south-east of Tulagi, with a pier; *Danae Bay*, on the east coast of Guadalcanal, with a small stone jetty; a good landing place with a pier at *Crawford Island*; *Vulava*, on the south coast of Ysabel, an island which has numerous good harbours; and *Choiseul Bay*, at the west end of Choiseul.

Of the outlying islands, Liueniua has several ship passages into the lagoon, of which the deepest is reported to have 6 fathoms of water. The Stewart Islands, Rennell and Bellona Islands have no anchorages.

(4) *Shipping Lines*

A direct service between Sydney and Tulagi is maintained by the steamers of Burns, Philp & Co., aided by a subsidy from the Commonwealth Government. A steamer leaves Sydney every six weeks, and takes about 8 days to reach Tulagi. The Gilbert Islands steamers, belonging to the same firm, make about six trips a year, calling at Tulagi going and coming with mails but not with cargo. A steamer belonging to Lever Brothers leaves Sydney every 11 weeks direct for the Solomon Islands, and the same firm has two small steamers working among the islands. Thus a service amounting, roughly, to one vessel every three weeks is provided with Sydney, while connection with the various islands and others outlying is maintained by small steamers and auxiliary vessels. The whole trade of the Protectorate before the war was, therefore, with Sydney; but there was a probability that the Norddeutscher Lloyd would extend its operations to the British Solomons, and, by offering low freight charges, divert much of the trade to Rabaul and Singapore (see also p. 102). It might be desirable to extend the existing services to China, especially for the sake of the rice trade, for rice is the chief exotic food of labourers in the Solomons.

The following table shows the shipping which entered the ports of the Solomon Islands in the years 1910-11 to 1915-16[1]:—

Year.	British.		Foreign.	
	Number	Tonnage.	Number.	Tonnage.
1910–11 ..	36	26,509	8	236
1911–12 ..	66	25,588	17	236
1912–13 ..	55	27,500	13	239
1913–14 ..	66	28,812	22	409
1914–15 ..	38	30,407	1	87
1915–16 ..	54	25,847	3	194

(5) *Telegraphic and Wireless Communications*

There is no cable connection.

A Government wireless station was erected at Tulagi in 1914.

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[1] Each year ending on March 31.

(B) INDUSTRY

(1) LABOUR

The problem of labour supply is more serious in the Solomon Islands than in any other of the Pacific groups. The native population, always insufficient in numbers, is decreasing, and no method of replacing it has yet been devised. The islands were for many years a favourite recruiting-ground both for Queensland and Fiji, but recruiting for the former has ceased since 1903, and for the latter since 1910. At present, the only source of labour supply is the Protectorate itself. The Indian Government rejected the proposal of Lever Brothers, the largest employers in the islands, to procure labourers from India, and attempts to introduce Chinese and Javanese have proved unsuccessful. One Australian authority considers that the Bismarck Archipelago might furnish a sufficient supply, but this appears to be doubtful. The islands are wholly unsuitable for white labour.

The natives work on the plantations on the indenture system. The term of employment is for two years for males over 16 years of age, the minimum wage being £6 a year for unskilled, £12 for more experienced, and £24 to £36 for really skilled men, housing, food, and clothing being provided. The supply of labour is hopelessly inadequate. At present, the number of these indentured labourers is something under 4,000, and this is apparently considered as the maximum available locally, apart from an uncertain supply of monthly labourers who are able to leave at will. This number is barely sufficient to cultivate the existing coconut plantations, much less to allow of their extension or of the development of other industries. Rubber requires one "boy" to two acres, and tobacco needs skilled labour, and neither of these industries can be undertaken in existing circumstances. It must be added that the inhabitants, having enough, or more than enough, for their needs, on the whole find little inducement to engage in any industrial work.

(2) AGRICULTURE

(a) *Products of Commercial Value*

Cereals.—Maize is grown on the rich alluvial flats on the north coast of Guadalcanal, and figures to a small extent in the list of exports, but in view of the demands of the copra industry it is doubtful whether it will ever be extensively cultivated. Rice has been grown successfully, and should prove profitable for local use, in view of the increasing scarcity and cost of native food.

Cocoa.—The islands are suitable for the growth of cocoa. Just before the war, the Germans were beginning to ship excellent cocoa from Bougainville.

Copra.—The fertility of the soil and the fact that hurricanes and droughts are unknown bid fair to make the Solomon Islands in time the largest producers of copra in the whole of the South Pacific. Moreover, coconuts do not require the same amount of skilled labour as, for instance, rubber or cotton, and therefore the labour difficulty is less serious. There is no sign of increase in the production of copra by the natives from their own trees; the future of the industry depends, therefore, on European plantations, the number of which is increasing year by year. More than 20 companies, of which Lever Brothers are by far the most important, are engaged in the industry, and in 1913 over 25,000 acres were planted, a figure which has since been considerably increased. The export of copra 10 years ago was only about 3,000 tons, but has now risen to over 6,000, and it is estimated that, given an adequate labour supply, this amount ought to be trebled in the course of the next 10 years. If this forecast were realized it would be profitable to have oil-crushing plant in the islands themselves. Although the heavy rainfall prevents the production in the islands of copra of the very highest quality (copra dried by smoke or hot air being inferior to that dried in the sun), the product is said to be nearly as good as that of Ceylon.

Cotton.—Plantations of cotton were formed some years ago on the north coast of Guadalcanal, where it was grown partly in connection with coconuts. Samples described as of a good useful character but rather coarse sold at Manchester in 1910 for 1*s*. to 1*s*. 2*d*. per lb. But scarcity of labour has caused cotton cultivation to be practically abandoned for the present.

Fibres.—The climate seems to be too damp for the successful production of sisal hemp, but specimens of the *Musa textilis* have grown well, and a market for this might be found in Australia.

Fruit.—As the islands are not subject to hurricanes, they are admirably suited for the growing of fruit, especially bananas. Bananas from the Solomons fetch the highest price in the Sydney market. They can be grown separately or among the young coconuts. At present, however, the industry is in its infancy, and difficulties of shipment confine it to a few places in the neighbourhood of Tulagi. Many other tropical fruits flourish, such as bread-fruit, jack-fruit, papaws, mangoes, and the Solomon Island almond or Kanary nut.

Ivory nuts.—These nuts of the sago palm (*Sagus amicarum* or *metroxylon*) are used extensively in Germany as a substitute for bone or ivory in button-making, but their value for this purpose was almost wholly overlooked by British manufacturers. There is an almost inexhaustible supply in the islands of these palms, which grow wild in swampy land unsuited to other products. As the trees take 20 years to bear and fashion may change in the meantime, they are not worth planting for the sake of the nuts alone, but the pith might prove a valuable source of starch.

Oil-producing Plants.—The climate and soil are favourable to the growth of soya beans and ground-nuts. Lever Brothers have imported palm seeds from

Africa, and started a nursery, with the object of producing palm kernels. If successful, they will form plantations and set up machinery to extract palm oil.

Resin.—Specimens of copal resin have been sent to the Imperial Institute for examination.

Rubber.—Many thousands of acres of forest land are available for rubber, and the climate is favourable. Lever Brothers planted a few acres as an experiment, and in 1913 rubber appeared in the list of exports for the first time. Owing to the labour difficulty, the industry is now at a standstill.

Sugar.—A large amount of land is suitable for this crop if capital and labour were available.

Tobacco.—Experiments in growing tobacco gave very good results, but cultivation was abandoned on account of the difficulty of obtaining labour.

Vanilla would grow well, but it is a risky crop in an unhealthy climate, because skilled white labour is necessary.

Live-stock.—The islands are reported to be well suited for the raising of cattle. Many planters keep herds grazing among the coconuts, thus saving labour in clearing the undergrowth. Lever Brothers keep 3,300 head of cattle for this purpose. The cattle industry could be extended, as there are good grazing grounds in most of the islands. Whether sheep would do equally well appears doubtful. On the one hand it has been asserted that they have been a failure; on the other, that they would flourish on the uplands, and that specimens of wool from the islands have astonished wool experts. Pigs are very profitable.

(*b*) *Forestry*

There is a great deal of valuable timber in the Protectorate, but so far only spasmodic attempts have been made to put it on the Sydney market. Arrangements had been made to export the timber of the *dilo* (*Calophyllum inophyllum*) for furniture-making, but the Sydney buyers subsequently cancelled the order.

There is an inexhaustible supply of this tree, as also of one allied to the New Zealand *kauri* and of the *Afzelia bijuga;* the latter is very valuable for sleepers and wharf piles, since it is impervious to white ants. If saw-mills were established on the islands, the timber could be used locally and heavy freight charges saved. One small saw-mill exists already on Guadalcanal.

(*c*) *Land Tenure*

It is estimated that there are about 9,500,000 acres on the islands. Before the Protectorate was established many abuses were prevalent, because white men obtained large tracts of land from natives for a nominal sum without proper enquiry into questions of title. Adjudication is still being made upon claims connected with such purchases. The next stage was to allow land to be purchased from natives in fee simple, after due investigation and with the sanction of the High Commissioner. About 170,000 acres appear to have been disposed of in this way.

Since the year 1912, the High Commissioner has withheld his sanction from any private purchase of land, but leases are granted by the Government, which either purchases land from the natives or leases it on their behalf, retaining 10 per cent. of the rent as commission. Land for agricultural purposes is granted on the basis of a 99 years' lease, at a rent of 3*d*. per acre for the first five years, 6*d*. for the second five, and so on, with the condition that one-tenth must be cultivated within five years, on pain of forfeiture. In 1912 about 240,000 acres of waste or vacant land were held on occupation licence, 18,110 acres had been purchased by the Government and leased to Europeans, and 980 acres had been leased by natives to Europeans.

The effect of these regulations is to make the Government the real owner of the land, the native being allowed ownership only when he can establish a right to land which he effectively occupies.

The leasehold system at present prevailing would appear to be unpopular with the planters, who urge that it discourages settlement and the investment of capital, and that they would prefer the freehold system which obtains in the late German colonies in the Pacific.

(3) FISHERIES

There is abundance of fish in the waters round the islands. Sponges of an inferior quality are found around Santa Ana and San Cristoval.

A fair amount of trepang (*bêche-de-mer* or *Holothuria edulis*) is bought by the traders and exported exclusively to China. That of the Rubiana lagoon is of good quality, but better methods of curing are necessary.

There is a considerable quantity of pearl shell round the islands, both of the more valuable gold-lip variety, in the deeper waters, and of the cheaper black-edged type. The best comes from the Manning Straits, between the islands of Choiseul and Ysabel. Turtle shell is obtained chiefly from the New Georgia group and from Ysabel, where turtles swarm. Green snail shell, which is used for button-making, is found in large quantities, and a regular market is forming. *Trochus* and other shells used for similar purposes abound. A market might be found for them in France, and one exists already in Japan.

(4) MINERALS

The accounts of the mineral products of the Protectorate are conflicting.

A small seam of *coal* has been reported in Guadalcanal. Reports of rich deposits of *copper* on Rendova Island have been shown to be false. Traces of *gold* and *silver* have been found in San Cristoval and in Ysabel, but it is very doubtful whether paying quantities exist. *Stream tin*, *hæmatite*, and *arsenical*, *iron* and *copper pyrites* have been found in San Cristoval.

A Melbourne syndicate was granted a concession a few years ago to collect *sulphur* in the island of Vella Lavella.

(C) COMMERCE

(1) *Foreign Interests*

Trade before the war was mostly in British hands, the foreign-made goods required being cheap articles for native trade, imported for the most part through Sydney. The chief German goods imported were cotton goods, cheap clothing, rugs and blankets, glassware, hollow and enamel ware, beads, perfumery and musical instruments. Of German firms settled in the Protectorate, the chief was that of Hernsheim & Co., which had its headquarters at Hamburg and possessed many plantations in the German colonies. This firm had established a depôt at Guadalcanal and had two auxiliary schooners trading in coconuts, ivory nuts and pearl shell. The intention seems to have been to develop German interests until it was worth while for the Norddeutscher Lloyd to extend its operations to the Protectorate. The Bismarck Archipel Gesellschaft, which had plantations on Bougainville, would also, had it not been for the war, have extended its activities to the British Solomons. The German firm of Justus Scharff & Co., Sydney, did considerable business with the islands. It dealt largely in German goods, and acted as agent for all the big firms on the German islands except the Neu-Guinea Kompagnie.

Since the outbreak of war, small parties of Japanese and Japanese vessels have visited the islands. It is reported that one company obtained a lease of land at Tulagi, but found the competition too severe. As yet the Japanese have not secured a permanent footing in the islands.

(2) *Exports*

The exports, by reason of the shortage of labour, consist almost wholly of copra, ivory nuts, and shell of various kinds. The following table shows the values of the exports in the years 1910-11 to 1912-13[1]:—

	1910–11	1911–12	1912–13
	£	£	£
Bananas	583	1,310	925
Coconuts	185	614	1,083
Copra	68,999	55,953	73,637
Cotton and cotton seed	737	847	491
General merchandise	928	1,486	2,382
Hardware and drapery	300	947	701
Ivory nuts	13,137	20,553	20,119
Maize	450	129	21
Pearl shell	207	1,574	5,081
Timber	41	1,658	1,751
Trochus and green snail shell	2,522	2,577	2,656
Turtle shell	725	1,416	1,006
Miscellaneous	77	170	68
Total	88,891	89,234	109,921

The destination of practically all these goods is Australia, with the exception of ivory nuts, which used to be collected for the German market (see p. 63). New Zealand receives only a negligible quantity of the products of the Protectorate.

(3) *Imports*

The imports consist chiefly of clothing, foodstuffs and tobacco. They have quadrupled in value in the last 10 years. The following table shows the values of the imports in the years 1910-11 to 1912-13[1]:—

	1910–11	1911–12	1912–13
	£	£	£
Boats, &c.	6,499	5,295	4,921
Drapery	15,089	14,267	13,360
Foodstuffs	17,693	25,392	24,568
Hardware	4,455	8,350	11,521
Timber	2,953	4,343	5,405
Miscellaneous	56,458	72,372	71,986
Total	103,147	130,019	131,761

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[1] Each year ending on March 31.

Practically all come from Australia. In 1914-15, out of a total value of £133,062, no less than £107,762 was sent from Australia, of which £43,412 represented Australian produce, and the remainder represented European goods trans-shipped.

(4) *Customs and Tariffs*

The latest tariff is defined by the proclamation of January 19, 1916, in the Western Pacific High Commissioner's Gazette. It consists of import duties on beer, spirits, &c., tobacco, cartridges, rifles, &c., and jewellery. Animals, meats, biscuits, drugs, machinery, manures, &c., are admitted duty free. There are complaints on the part of the traders that this new tariff discourages pioneering work. The tariff is, however, to a great extent a war measure, and is intended *inter alia* to check the native passion for jewellery.

(D) FINANCE

(1) *Public Finance*

The revenue and expenditure of the Protectorate for the years 1910-11 to 1915-16 were as follows:—

Year.	Revenue.	Expenditure.
	£	£
1910–1911	14,130	9,493
1911–1912	16,040	22,639
1912–1913	15,432	16,503
1913–1914	24,520	18,565
1914–1915	22,646	23,146
1915–1916	22,006	26,426

The expenditure for 1911-12 included £9,026 spent on the purchase of a Government steamer, and the totals for 1914-15 and 1915-16 included part of the cost of a wireless station.

The budget details for 1912-13, which are the latest available, were as follows:—

Revenue.	£	Expenditure.	£
Customs	10,415	High Commissioner's Dept.	226
Licences, &c.	1,691	Resident Commissioner's Dept.	2,288
Fees, &c.	328	Postal Dept.	108
Post Office	1,107	Treasury and Customs	665
Rent of Government Property	885	Audit Dept.	42
Land Sales	17	Port and Marine Dept.	93
Miscellaneous	989	Native Labour	364
		District Administration	1,634
		Police	1,676
		Prisons	40
		Medical Dept.	569
		Government Steamer	4,340
		Transport Dept. (extraordinary)	461
		Survey	262
		Public Works (recurrent)	302
		Public Works (extraordinary)	2,100
		Purchase of Land	1,306
		Miscellaneous	27
Total	£15,432	Total	£16,503

(2) *Currency and Banking*

The currency is that of the Commonwealth.

There are no banking facilities at present, but the great commercial firms, such as Lever Brothers, are very anxious that such facilities should be established.

SANTA CRUZ ISLANDS

(A) MEANS OF COMMUNICATION

Ports and Shipping

Graciosa Bay, on the north-west of Santa Cruz or Ndeni Island, is one of the best harbours in the

Pacific. It is about 3½ miles long and 1½ broad, well protected, and with good holding ground. There is a good but small harbour at *Manevai Bay*, in Vanikolo Island. It is possible that further surveys will prove that *Basilisk Harbour* in Utupua is a good harbour. There are several anchorages for small vessels, but landing on the open coast is usually difficult. The anchorages at *Tikopia* and at *Anuda* are poor. Shipping communications are infrequent and uncertain.

(B) INDUSTRY

The islands are at present almost wholly undeveloped. The natives grow their own foodstuffs, such as yams and *taro*, and cultivate a fair number of coconut palms. Bananas, bread-fruit, and tropical fruits generally would do well. There is plenty of fish. *Bêche-de-mer* is found and turtles exist in considerable numbers. The natives display great skill in the building of canoes and the manufacture of fine mats on a simple form of loom.

A peculiar feature of these islands is the use of feather money, "the fine breast feathers of a small bird, stuck together to form plates, which are fastened to a strip of sinnet, so that a long ribbon of scarlet feathers is obtained." These rolls are very valuable because so few feathers can be obtained from each bird. It is stated that a single roll will buy a woman.

V. THE GILBERT AND ELLICE ISLANDS COLONY

GILBERT AND ELLICE ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

There is a good road system throughout the groups. In 1915 it was reported that the colony contained 200 miles of good roads, varying in breadth from 12 to 14 feet, constructed of *riburibu* or reef mud, and fit for motor bicycle traffic. These roads run the whole length of the islands on the lagoon side, or, where there are no lagoons, above the western beaches. The upkeep of the roads costs nothing, for they are made and mended by natives during the 78 days per annum which all male natives over the age of sixteen have to devote to communal work.

(2) *Posts, Telegraphs, and Telephones*

The postal centre is at Ocean Island, with local centres at Tarawa, Abemama, and Beru in the Gilberts and Funafuti in the Ellice group. A money order system has been established for some years, and a postal order system was inaugurated in 1916. It is reported that the natives eagerly avail themselves of the facilities thus afforded. There is no telegraphic system, but in 1915 there were four miles of telephone wires.

(3) *Ports*

The conditions of landing in the different islands vary greatly. "Some islands have lagoons containing anchorages, while others have neither lagoons nor anchorages and are surf-bound." Landing on many of the islands is almost impossible in a west wind, and in any case it is a lengthy operation; at some islands the ship anchors 6 or 7 miles off the land, and it takes 4½ hours to get ashore.

In the Gilberts the two ports of entry are Tarawa and Butaritari. The best anchorage is at *Tarawa*, where there is a good passage through the reef, 4½ fathoms in depth, and secure anchorage in the lagoon. *Nonouti* has a ship entrance into the lagoon, but the channel is very intricate. *Abaiang*, *Abemama*, and *Butaritari* have also good passages for ships drawing 15 feet or less. The remainder of the islands have bad anchorages or none at all.

In the Ellice group there is only one good harbour, at *Funafuti*. This has secure anchorage up to 29 fathoms inside the lagoon and several entrances, of which the best has a depth of $4\frac{1}{2}$ fathoms. *Niurakita*, *Nukulailai*, and *Vaitupu* have fair anchorages outside the reef, but landing is in all cases difficult. *Nukufetau*, the administrative headquarters, has an anchorage inside the lagoon.

At *Ocean Island*, the administrative headquarters for both groups, there is no anchorage for large vessels, but moorings are laid down in Howes Bay.

(4) *Shipping Lines*

The only important shipping firm which trades with these islands is that of Burns, Philp & Co. This firm provides a subsidized mail service twice a month to Sydney. The trunk steamer calls at Ocean Island for mails and passengers and connects at Tarawa or Butaritari with the local steamer of the same firm, which conveys mails once in two months throughout the Gilbert and Ellice groups.

Australian mails are also carried by chartered steamers of the Pacific Phosphate Company. Direct communication between Ocean Island and London *via* the Siberian Railway was possible at irregular intervals by steamers of the same company trading with Japan. The Houlder Line of Sydney used to run a steamer every three weeks to Danzig, carrying phosphate.

The Samoa Shipping and Trading Company (a Sydney firm, whose headquarters have recently been transferred from Samoa to Funafuti) have a small steamer which runs five or six times a year between the Union and Ellice groups. On Chong & Co., a Chinese firm at Sydney, also have a small steamer which visits the groups to collect copra and other produce.

Before the war the German Jaluit Gesellschaft had a motor schooner connecting its headquarters at Jaluit, in the Marshall Islands, with the Gilberts.

(5) *Cable and Wireless Communications*

There is no cable communication.

A high-power wireless station was opened on Ocean Island in May, 1916. The rates are reported to be rather high, as traffic is charged on the international scale, the installation being outside the Commonwealth wireless extension system.

(B) INDUSTRY

(1) Labour

The labour supply in this colony may be regarded as adequate, at any rate, in comparison with other Pacific groups. Most of the islands are fully populated, one or two of the central Gilberts forming the only exceptions.

From about 1865 to 1885 the group was a favourite recruiting area, but the greater part of such recruiting has now been stopped. The Pacific Phosphate Company is allowed, under the control of the Resident Commissioner, to recruit 200-300 natives yearly to work its deposits on Ocean and Nauru Islands. The indentures are for a period of from 12 to 18 months, with a possible extension of another 18 months; the hours, wages, &c., are provided for by King's Regulations No. 1 of 1915. Further, a limited number of Gilbert Islanders are recruited for plantation work on Fanning Island and Washington Island. The people are, on the whole, too well off to desire to emigrate. There are no openings for white labour, except in the employment of the Pacific Phosphate Company at Ocean Island.

It is to be hoped the missionaries, who have entire control of education, will introduce industrial training, especially blacksmiths' work, boat-repairing, &c., and instruction in agriculture. The London Missionary Society conducts a central training school on advanced lines in Beru Island (Southern Gilberts).

(2) AGRICULTURE

(a) *Products of Commercial Value*

Copra.—" The financial future," wrote the Resident Commissioner in 1914, " is wholly dependent on the fluctuations of the copra market." The copra made in the Gilberts is reported to be of a superior kind, for the absence of continuous rains enables it to be dried in the sun, which is the best method. On the other hand, the islands suffer from terrible droughts, which reduce the export of copra very considerably, and often necessitate a total or partial remission of taxes (which are paid in copra) and the distribution of free rice and coconuts. Again, the irregular shipping communications of the islands do much harm to the industry. The natives who make copra have to wait so long to dispose of it that, finding that they have to bear the losses attributed to shrinkage in weight and to deterioration, they make only enough to meet their immediate requirements when a vessel is expected. It is reported that both groups could produce much more if the rainfall were normal, and if the natives received more encouragement to trade by being offered better prices and supplied with goods of better quality. The Government has started reserves on all the islands of both groups; further, it purchases fertilizers and instructs the natives in their use. The yield of coconuts in the Ellice islands is smaller than in the others.

Other products.—Next in importance to copra is the *pandanus*, of which many varieties are found, the fruit of the greater number being edible. Its stems provide beams and posts, its root a red dye, and its leaves, which are more durable than those of the coconut palm, furnish material for thatching and for the manufacture of mats and hats. The *babai* (a species of *taro*), and bread-fruit, are grown in yearly increasing quantities. The sterility of the soil and the periodic droughts make it doubtful whether it is profitable to grow fruit, such as bananas, oranges, and pineapples. The Government is trying to encourage the planting of these and of tropical vegetables with a view to making the islands less dependent on the coconut.

Ocean Island has papaws, almonds, mangoes, pineapples, limes, jack-fruit, bananas, pumpkins, and sweet potatoes, but the inhabitants are said to be too well off to trouble to cultivate them.

(b) *Irrigation*

The water supply of the islands might be improved. The cement cistern at Ocean Island should be extended, and, as fairly good water is to be found in the other islands a few feet below the surface, reservoirs should be constructed.

(c) *Land Tenure*

There are said to be about 115,000 acres in the two groups. All the land belongs to the natives; there is no alienation in fee simple; and, owing to the existence of a fairly numerous population on the islands, there is not much spare land. The only exception is in the central Gilberts, where the landowners "leave to waste a vast quantity of valuable produce." The Resident Commissioner suggests that here it would be satisfactory to see such surplus lands under the control of some commercial enterprise, which, through organization, employment and example, would be an advantage to the whole community.

The land system of the groups is one of great complexity, owing to subdivisions and cross divisions. Land is held in common by a family, and alienation is difficult. The system of *tibun* (adoption) complicates matters still further and is the source of endless quarrels. A Native Lands Commission was proposed in 1917 to investigate the question of title and bring the land registers into order. Although, as mentioned above, the sale of land outright is prohibited, the Resident Commissioner may consider the advisability of granting leases in parcels of not more than 5 acres in extent for a period not exceeding 99 years. A larger amount may not be granted, except with the sanction of the High Commissioner or Secretary of State.

(3) Fisheries

There is plenty of fish in the lagoons, but some species are poisonous at times. The waters round the islands teem with sharks, and until 1900 the export of sharks' fins was second only to that of copra. The industry has now fallen off, but might be revived.

The *bêche-de-mer* industry might be considerably developed; although the slug exists in fair quantities in both groups, it is stated that the natives will not take the trouble of searching for and curing it, when copra will give them all the wealth they want. The pearl shell industry is probably also capable of development, though the supply of shell is not very great.

(4) Minerals

The only mineral is the phosphate on Ocean Island. The deposits cover an area of only 1,500 acres, but they are of great depth, and the phosphate is said to be of excellent quality. There is a great demand for this fertilizer in Australia and Japan. Before the war much of it went to Germany, where it was converted into superphosphates, chiefly for sale to Russia. The Pacific Phosphate Company possesses the sole mining rights for Ocean Island, and also for the island, lately German, of Nauru.[1] The company pays a fixed sum per acre for its rights to the natives, who also receive compensation for the removal of coconuts, &c., while a tonnage royalty on the phosphate shipped is paid into a trust fund for their use.

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[1] A full account of the phosphate deposits in the Pacific Islands will be found in *Former German Possessions in Oceania*, No. 146 of this series, p 65.

(C) COMMERCE

(1) *Foreign Interests*

Before the war the Jaluit Gesellschaft, with its headquarters at Jaluit, in the Marshall Islands, was established at Butaritari, in the Northern Gilberts. It had a preponderant, but not exclusive, part in the importation of German and Austrian goods. British firms also acted as distributors of these goods, which "appealed by their cheapness to the trader or by some carefully designed appropriateness to the native." Cheap prints, sewing-machines, enamelled ware, cheap perfumery and cheap jewellery were thus imported; the Resident Commissioner stated that he had never seen British-made matches in that part of the Pacific.

The Pacific Phosphate Company (see p. 77) is a British firm; but, in order to secure a share of the phosphate deposits in Nauru, it gave the Jaluit Company 25,000 shares, while one German managing director and two other German directors were put on its board.

The activities of the Deutsche Südseephosphat A/G., though nominally confined to the Palau (Pelew) Islands, would probably, had it not been for the war, have proved dangerous, whether by way of competition or of amalgamation, especially as it is practically a subsidiary business of the Norddeutscher Lloyd.

Since the outbreak of war, which involved the occupation of the Caroline and Marshall Islands by the Japanese, the latter have taken the place of the Germans as trade competitors. Many Japanese traders have settled in the Gilberts, and two Japanese companies, the Nanyo Boyeki Kaisha (South Sea Trading Company) and the Nanyo Koygo Kaisha, have established head stations at Butaritari. Numerous steamers and schooners visit the islands from the Carolines and Marshalls, and, owing to the low cost of running these vessels and the cheap quality of the supplies carried, it is stated that Australian-manned vessels cannot compete against them.

Two Chinese companies, On Chong & Co. and Peter Yee Wing & Co., have numerous stations in the islands.

(2) *Exports*

The exports consist almost wholly of copra and phosphate of lime, the latter from Ocean Island alone. In both cases they show a fairly steady rise, though the copra supply is liable, as in 1910, to drop suddenly in consequence of a serious drought. Trade statistics are not available for the years previous to 1912-1913. The following table shows the values of the exports from 1912-1913 to 1916-1917[1]:—

—	1912–13	1913–14	1914–15	1915–16	1916–17
	£	£	£	£	£
Copra	35,000	45,000	50,000	54,386	81,004
Phosphate	283,000	305,000	229,000	128,440	95,688
Sharks' fins	—	—	—	422	225
Total ..	318,000	350,000	279,000	183,248	176,917

Four-fifths of the exports go to Australia and a very small amount to New Zealand.

(3) *Imports*

The imports consist almost wholly of clothing and foodstuffs. They are steadily increasing in value, having risen from £21,407 in 1901 to £122,396 in 1916. Mr. Mahaffy[2] notes that the advance of civilization among the natives is shown by the scorn with which they look on their former diet of coconuts, *pandanus* and fish; by their demand for rice, meat, sugar and biscuits, and for clothes of shocking shape and atrocious colour; by the replacing of the mat sail of canoes by a canvas substitute made on sewing-machines, and generally by the rapid decline of the simple native arts and crafts. The following table shows the values of the imports in 1915-1916 and 1916-1917[1] :—

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[1] Each year ending on March 31.

[2] Cd. 4992, 1910.

—	1915–16.	1916–17.
	£	£
Benzene	50	940
Building material	9,754	12,822
Drapery	20,835	16,042
Explosives	198	305
Hardware	10,012	20,344
Jewellery	165	204
Kerosene	480	1,585
Methylated spirits	41	—
Oils	733	2,928
Perfumery	345	690
Provisions	37,294	47,738
Spirits, wines, fermented liquors	1,509	1,586
Tobacco	3,517	5,512
Miscellaneous	23,850	11,700
Total	108,783	122,396

Most of the trade is done with Australia, a small amount only with New Zealand. In 1914 the value of goods imported from Australia was £64,062, of which £34,573 represented goods of Australian origin.

(D) FINANCE

(1) *Public Finance*

The revenue and expenditure of the colony in the years 1911 to 1915-1916[2] were as follows :—

Year.	Revenue.	Expenditure.
	£	£
1911	21,331	17,965
1912–13	30,272	17,952
1913–14	42,791	21,615
1914–15	16,120	23.522
1915–16	23,117	32,867

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[1] Each year ending on March 31.

[2] Each year ending on June 30.

The details of the budget for 1915-16 were as follows:—

Revenue.				Expenditure.			
	£	s.	d.		£	s.	d.
Customs	7,197	9	1	Pensions	302	10	0
Taxes, &c.	5,929	17	10	High Commissioner's Department	732	11	9
Licences, &c.	3,843	11	0	Resident Commissioner's Department	2,642	8	1
Fees of Court, &c.	226	19	6	District Administration	2,490	15	4
Post Office	439	12	2	Island Administration	4,130	0	10
Royalty on phosphate	2,994	3	2	Police and Prisons	3,836	6	8
Interest	1,128	18	5	Ocean Island Volunteer Reserve	137	7	1
Miscellaneous	1,356	13	9	Medical Department	4,504	0	7
				Transport Department	821	4	6
				Postal Department	1,064	10	5
				Erection of Wireless Station, &c.	6,765	9	2
				Wireless Telegraphy Department	722	7	11
				Audit Department	217	11	7
				Part cost new vessel	126	5	0
				Public Works (recurrent)	684	19	3
				Public Works (extraordinary)	2,350	13	5
				Miscellaneous	1,338	13	6
Total	£23,117	4	11	Total	£32,867	15	1

The revenue from taxation is chiefly raised from import duties on beer, spirits, wine, tobacco, and perfumery, to which has recently been added a tax of 12½ per cent. *ad valorem* on clothing imported from Europe and the materials for its local manufacture; also from licences for trading stations, vessels and boats, dogs, and firearms. The ports of entry are Ocean Island, Tarawa, Butaritari, and Funafuti.

The native taxes are assessed on the native landowners in accordance with the number of the native population and the productiveness of each island; they are paid in copra. After deducting the King's tax and the actual cost of the native administration, the balance is paid into the Island Fund, which is intended for use in the emergencies arising from droughts, hurricanes, &c.

(2) *Currency and Banking*

The currency is that of the Commonwealth. There are no banking facilities at present.

UNION OR TOKELAU ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Ports*

There are no harbours in this group and not even a boat passage into any of the lagoons. Landing is generally difficult. At Gente Hermosa Island a passage has been blasted through the reef. This island has a good road system.

(2) *Shipping Lines*

The group is visited four times a year by steamers from Sydney, and by vessels from the Ellice Islands at intervals of about two months. The service is provided by the Samoa Shipping and Trading Company (see p. 73).

(B) INDUSTRY

Beyond a few bananas and bread-fruit, the only product of economic value is the coconut palm. On Gente Hermosa Island about 800 acres are planted with these trees. The other islands of the group export about 200 tons of copra annually. Fakaofu is the only island with a fresh water supply.

FANNING AND WASHINGTON ISLANDS

(A) MEANS OF COMMUNICATION

Fanning Island

(1) *Ports*

There is a ship entrance into the lagoon at *English Harbour* on the west coast. The channel through the reef is 200 to 300 yards wide and 4 to 6 fathoms deep. Vessels drawing less than 15 feet have plenty of room. The harbour could be much improved by dredging and blasting, but most of the lagoon is too shallow to be of any use. There is a concrete jetty with a tramway, and vessels of 18 feet draught can load alongside.

(2) *Shipping Lines*

A steamer of the Canadian-Australian line (run by the Union Steamship Company of New Zealand) calls occasionally, and the island is visited regularly by the Pacific Cable Board's repairing steamer, and also by schooners collecting copra.

(3) *Telegraphic Communication*

The Pacific Cable Board has a landing station opposite Whaler Anchorage on the north-west coast for its cable between Vancouver Island and Suva.

Washington Island

There is good but exposed anchorage off the west coast. There is no boat passage into the lagoon, and landing is bad. "During the bad weather, and for some time afterwards, communication is absolutely out of the question."

(B) INDUSTRY

Fanning Island

The coconut and the *pandanus* are indigenous to the island and a large amount of copra is produced.

The soil is fertile, and wild bananas, bread-fruit, figs, pineapples, and arrowroot of the finest quality are produced. Fish and turtles abound, and there are small pearl oysters in the lagoon. The guano beds, which were formerly a source of profit, appear to have been worked out.

The water supply of the island has been much improved by the construction of a rainwater storage tank, with a capacity of 8,000 gallons.

Washington Island

Labour is supplied by the Gilbert Islanders under indenture of three years, and is subject to the strict supervision of the Deputy Commissioner.

The island produces a considerable amount of copra (about 400 tons in 1910), and it could supply fruit. The soil is fertile, but the water supply is poor. Guano exists, but the deposits are not now worked.

(C) COMMERCE

The imports from New Zealand to Fanning Island amounted in 1912 to £353 and in 1913 to £1,215.

V*a*. *PHŒNIX ISLANDS*[1]

(A) MEANS OF COMMUNICATION

(1) *Ports*

There are no harbours in this group, and only a few of the islands afford even temporary anchorage. Landing on the outer side of the reef is generally difficult, but Hull Island and Canton Island have boat passages into the lagoons.

(2) *Shipping Lines*

Occasional voyages are made to the islands by the steamers of the Samoa Shipping and Trading Co.

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[1] See footnote, p. 16.

They are also visited periodically by a Government steamer from the Gilberts.

(B) INDUSTRY

These islands are now leased to the Samoa Shipping and Trading Company (see p. 73), to whom Lever Brothers transferred their rights. The company is planting coconut palms, and states that in the course of a year from 700 to 1,000 tons of copra are handled. Turtles and fish are found in fair numbers. Formerly phosphate deposits were worked on Baker Island, but in 1910 these were reported to be abandoned, as the supply was apparently exhausted.

Few of the islands have any water supply.

VI. FIJI ISLANDS AND ROTUMÁ

(A) MEANS OF COMMUNICATION

(1) *Roads*

The development of agriculture and of tourist traffic in Fiji was long hindered by the absence of a proper road system. Lately there has been a considerable improvement. Road boards have been formed in each province to disburse the funds provided by the Government for road construction. The cost is borne by the General Revenue, except in the municipal areas of Suva and Levuka and in the case of native tracks. In 1916 there were about 800 miles of roads, varying in width from 12 to 24 feet, and 1,200 miles of bridle tracks.

(2) *Rivers*

In Viti Levu, the Rewa river is navigable by steam vessels of 50 tons as far as the Colonial Sugar Refining Company's estate, 11 miles from Lauthala Harbour, and by boats and shallow-draught steamers to a distance of nearly 60 miles from its mouth. The Navua, the Singatoka, the Mba and the Nandi rivers are also navigable for short distances by boats and shallow-draught steamers. In Vanua Levu, the Ndreketi river is navigable for some 20 miles.

(3) *Railways*

There are no public railways in the colony. A line, however, is projected in the Rewa valley in order to bring about a development of the green-fruit trade. The scheme which has been adopted by the Legislative Council provides for a line 50 miles long, at a cost of £200,000.

The Colonial Sugar Refining Company owns a system of light railways or tramways of some 100 miles in length, connecting their various estates in the western parts of Viti Levu, between Navua Bay on the north coast and Singatoka on the south-west; and in addition a light railway in Vanua Levu, connecting the sugar estates with Lambasa. The relations of this system to the Government are regulated by Ordinance No. 24 of 1912, under which the company is to allow the use of the lines to the public on certain days of the week.

(4) *Posts, Telegraphs, and Telephones*

In 1916 there were in the islands 67 post offices and 9 telegraph offices, which dealt with 1,283,284 letters, 761,425 newspapers, books, &c., and 27,574 parcels. The British and foreign mails are conveyed by steamers of the Canadian-Australian Royal Mail in consideration of a subsidy of £5,000 per annum, and by other lines (see under Shipping). The owners of the s.s. "Amra" receive a subsidy of £4,500 for the interinsular service provided.

The latest official returns give the length of telegraph line as 54 miles: the line runs from Suva to Levuka and includes 11½ miles of submarine cable.

The telephone lines, which are controlled by the Government, extended in 1916 over 198¾ miles.

(5) *Ports*

There are three ports of entry in the islands: Suva, the capital, on the south coast of Viti Levu; Levuka, the old capital, on the small island of Ovalau, off the east coast of Viti Levu; and Lautoka, on the west coast of Viti Levu.

Suva has one of the best harbours in the Pacific. It is 2 miles long by 1½ to 2 miles broad, almost perfectly protected, with anchorage in from 5 to 18 fathoms available for all classes of vessels. Harbour works are being completed at a cost of £200,000; the Queen's Wharf, 330 yards in length, is being extended, a slip capable of taking vessels up to 500 tons burden has been constructed, and 17 acres of land are being reclaimed. When this work is completed all vessels will be able to berth at the wharves.

Suva is one of the chief ports for shipping copra and bananas. Its trade in 1913 and 1917 was as follows:—

Year.	Imports.	Exports.
	£	£
1913	600,390	601,242
1917	592,368	611,504

The following table shows the nationality, number and tonnage of the ships which entered Suva harbour during 1913:—

Flag.	Number.	Tonnage.
British	101	279,614
American	4	2,222
French	1	93
German	1	907
Norwegian	2	3,323
Total.. ..	109	286,159

Levuka harbour has a good anchorage and is safe except during strong easterly winds. It has a depth of 16 fathoms. There is a wharf with an extension alongside which vessels drawing 18 feet can lie, and parallel to this is a pier 400 feet long. Levuka has an extensive trade with the islands of the Eastern group, which use it as their local market for copra, &c. In 1917 the value of its imports and exports amounted to £424,529, the value of the imports being £164,639, and of the exports £259,890.

In 1913 22 vessels of 25,514 tons entered and 23 vessels of 24,007 tons cleared. These were British, except that two American vessels of 1,082 tons entered and one of 482 tons cleared.

Lautoka port is one of the most important centres of the sugar industry. In 1917 the value of its trade was £1,432,869, its imports amounting to £235,862, and its exports to £1,197,007. In 1913 17 vessels of 43,143 tons entered and 18 of 40,058 tons cleared.

There is also a good harbour at *Lauthala*, at the mouth of the Rewa river.

In Vanua Levu the most important anchorage is at *Malau*, near Lambasa, on the north coast. Lambasa is the centre of an important cane-growing district; it possesses a mill, tram-lines and a wireless station. There are numerous anchorages on the south coast: the best is at Savu-Savu; but there are also others fit for steamers at Mbua Bay and Mbutha Bay. Of the many anchorages for small craft in Vanua Levu and Taveuni, Wairiki is one of the worst; Somosomo Strait is dangerous by reason of the squalls and currents.

Of the other islands, Taveuni, known as the "Garden of Fiji," has a roadstead at *Waiyevo*, on the north side, with a wireless station; Vanua Mbalavu has a port at *Loma Loma* with a small well-protected harbour. There are harbours at *Ngaloa*, in Kandavu, and at *Totoya*, *Matuku*, *Moala*, and *Ngau*. Rotumá has anchorages on the north, but no harbour.

(6) *Shipping Lines*

Communications with Fiji are maintained by the following British-owned shipping lines:—

The Canadian-Australian Royal Mail Line runs a steamer once a month from Vancouver to Sydney and *vice versa*, calling at Honolulu, Suva and Wellington. This line is worked by the Union Steamship Company of New Zealand, which, together with the Australian United Steam Navigation Company, runs numerous steamers to the islands from Sydney, Auckland, and Melbourne; there is at least one steamer a week.

The two latter companies, together with Burns, Philp & Co., Lever Bros., and the Colonial Sugar Refining Company, also run frequent services of steamers and other craft between the islands to collect sugar, copra, bananas, &c. Further, the planters own schooners and an increasing flotilla of motor-boats. (For German and American competition, see pp. 102-3.)

The shipping entered and cleared at the ports of Fiji during the years 1911 to 1915, exclusive of the coasting trade, is shown in the following table:—

Year.	British Tonnage.	Foreign Tonnage.	Total.
1911	577,731	7,204	584,935
1912	597,890	15,453	613,343
1913	694,575	17,121	711,696
1914	620,913	43,337	664,250
1915	803,371	18,195	821,566

The following analysis of the returns for 1913 shows how the inward shipping was divided among the various flags:—

Flag.	Number.	Tonnage.
British	138	347,188
French	1	93
German	1	907
American	6	3,305
Norwegian	2	3,323

(7) *Cable and Wireless Communications*

The Pacific Cable Board has a station at Suva, which is connected by cable with Vancouver Island *via* Fanning Island, and with Southport (Queensland) and Auckland (N.Z.) *via* Norfolk Island.

In 1916 there were four wireless stations, at Suva, Lambasa, Savu-Savu and Taveuni, all under Government control. Although considerable use is made of this system, there is a complaint that the charges are excessive and much higher than the cable rates.

(B) INDUSTRY

(1) Labour

It is impossible to do more than indicate the chief points of the complicated and perplexing problems concerning the labour conditions of Fiji. The general position is well summed up by the High Commissioner in his report for 1914: "Generally speaking, the natives, being the landlords of the colony, are so well off that there is little inducement for them to take a direct active interest in agricultural pursuits. For instance, in the Mba province, which is now the chief sugar centre, the people are rapidly ceasing to be agriculturists owing to the fact that they derive a considerable income from the rents of their lands."

Although the latest returns show a slightly increasing native Fijian population, the numbers having risen from 88,775 in 1914 to 90,429 in 1916, the original difficulty arose from the alarming decrease of the native population. Epidemics, inbreeding, the abolition of polygamy, the wearing of European clothes (which was responsible for pneumonia), "the narcotic influence of a communal system which has outlived its usefulness, and made it useless to save and produced inherent fatalism," and laziness, the result of the *pax Britannica*, had all contributed to reduce the numbers and the energy of the native workers, at the very time when the vast economic possibilities of the islands were first realised.

The consequence was the introduction of coolie labour from India. After a long correspondence between the Indian and Fijian Governments, ending in the Indian Government's consent to a scheme of emigration under indenture, the first Indian coolies arrived in 1879. Since that date they have been coming in at the rate of some 2,000 a year, and at the end of 1916 they numbered 59,565 souls, so that the native Fijians outnumbered them by only one-third. It has been well said that they have built up the prosperity of the country and that their departure would spell ruin to the planting industry and the colony generally. The greatest care is taken of their interests. The recruiting is "done by accredited agents of the Fijian Government, regulated and supervised by European and native officials of the Indian Government. Their housing and general treatment are carefully watched by the Agent-General of Immigration and resident inspectors in all the large centres of employment. The cost of housing, sanitation and medical attendance is borne by the employers." The Indians come to Fiji for ten years, for five of which they work under indentures for approved employers, while for the remainder they are independent, and after the tenth year are entitled to a free passage to India at the expense of the general revenue of the colony. Many, however, remain in Fiji. They take small holdings at a nominal rent and cultivate rice, maize, tobacco, &c. The Colonial Sugar Refining Company has initiated a scheme for their settlement on ready-made farms at the end of the first five years of their indenture and for their occupation when the indenture is expired. The consequence is that the greater part elect to remain. Thus, in 1914, there were in the colony 15,602 Indians serving under indenture and 27,754 time-expired.

Unless, then, the native Fijian can be induced to work —and already, as the result of better education, he is capable of hard, if spasmodic, labour—Fiji seems destined to become little more than a prosperous Indian colony. More outside labour is a necessity, and it is agreed that Indians are preferable to Chinese or Javanese. The chief causes of discontent among the Indians appear to be caste difficulties, the restrictions as to the number of women, who are only about 30 per cent. of the whole, and the comparatively low rate of wages (men, 1*s*. a day: women, 9*d*. for three-quarters of a day), which, though higher than in India, is counterbalanced by the higher cost of living in Fiji. But healthy and industrious Indians are able to add considerably to their wages by doing piece work. It is, however, urged against the immigrants that they are responsible for the greater part of the crime of the colony.

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

Vegetable Products.—Practically the whole population is engaged in agricultural pursuits, especially in the production of sugar, copra, and green fruit. These three products make up about 97 per cent. of the total export trade, and occupy about 77 per cent. of the total cultivated area. The total area under cultivation in 1913 was 112,089 acres; in 1914, 134,954 acres; in 1915, 140,323 acres; and in 1916, 119,690 acres.

Almost any tropical product such as tea, coffee. cocoa, spices and cotton can be grown. The only question is whether, in view of labour difficulties and the comparatively poor shipping facilities, their cultivation would be profitable.

Beans were produced to the extent of 11,111 bushels in 1913, the acreage occupied being 3,274; 7,110 bushels in 1914, the acreage being 2,108; 4,252 bushels from 1,778 acres in 1915, and 7,197 bushels from 2,534 acres in 1916.

Cocoa equal in quality to high-class Ceylon cocoa, and superior to the cocoa of Trinidad, has been grown at Levuka. There is every hope that cocoa will eventually prove a profitable crop. The amounts produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	3	3	3	4
Acres under cultivation ..	53	50	50	50

Coffee grows well, but is liable to leaf disease.

Copra is chiefly produced in the islands of Taveuni and Rotumá, the Lau and Yasawa groups and parts of Vanua Levu and Ovalau. It is a paying industry, especially if cattle are kept in the plantations, for the profit derived from the cattle pays almost the entire cost of the production of the copra. The expense of clearing the land is estimated to be £1–£4 per acre. The trees will yield a small crop in five or six years and bear fully in twelve. Hurricanes and the coconut leaf moth are the chief enemies of this industry. The area planted with coconut palms and the amounts of copra and coconuts produced in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons of copra produced ..	4,193	3,402	4,759	5,479
Number of coconuts produced..	167,668	33,800	18,800	15,800
Acres under cultivation ..	32,915	42,492	45,102	32,864

Cotton.—About the year 1865 considerable quantities of Fijian cotton were imported into the United Kingdom, where, "on account of its silky gloss, whiteness and length of staple, it sold regularly." Owing to the cessation of the U.S. Civil War and the drawback of a wet climate, the export declined, but it is well worth reviving. The area under cultivation rose from 24 acres in 1913 to 530 in 1914, and remained as high as 525 in 1915. It sank, however, to 5 in 1916. The Indians are now growing cotton, and in 1914 about 10,000 lb., all grown from seed distributed from the Government station at Lautoka, was bought by the Agricultural Department and stored ready for sale to the British Cotton-Growing Association.

Fibres.—A considerable number of the more valuable fibre-producing plants can be grown in the islands. Sisal hemp, in particular, bids fair to provide an important industry. The Government offered a bonus of £500 to the person or firm producing the first ten tons of marketable sisal fibre, and this was gained by the Veisare Sisal Hemp Company. A sample submitted to the Imperial Institute was favourably reported on as "valuable for rope-making and worth £34 to £35 a ton." Mauritius hemp (from the *Furcraea gigantea*) and bowstring hemp (from *Sansevieria guineënsis*) are also excellent, and "would be readily saleable in large quantities." Samples of *ramie* fibre of the variety *Boehmeria nivea*, which is being increasingly used, in combination with wool, for tablecloths, carpets, &c., were found to be worth £25-£30 a ton, and American aloe (agave) fibre, of excellent quality and length, was worth £30 a ton.

Fruit.—The growth of Fiji's trade in fruit, especially in bananas, has been enormous. The chief fruit-growing districts are in the Rewa valley and around Suva in Viti Levu, and at Savu-Savu in Vanua Levu. Under favourable circumstances, bananas are a very profitable crop, as the fruit is obtainable all the year round; the trees bear in 12 to 18 months after planting, and one labourer to six acres is sufficient for their whole cultivation. On the other hand, they suffer terribly from hurricanes and disease, and they tend to exhaust the soil. In consequence of these disadvantages, the latest returns show that the cultivation of bananas has ceased over a considerable area of land in Fiji, and this process will continue unless suitable fertilizers are found. Pineapples are produced for export, and most of the citrous fruits grow well. A trade in lime fruit and juice is growing up with Canada, where it is hoped to find an increasing market for fruit. The amounts of bananas and pineapples grown and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Bananas—				
Bunches produced	668,095	690,646	527,658	132,826
Acres under cultivation ..	6,608	6,668	5,782	3,676
Pineapples—				
Cases	500	2,393	3,636	3,645
Acres under cultivation ..	99	115	343	335

Maize figures to a small extent in the list of exports. The following table shows the amount of production and the area under cultivation in the years 1913-16:—

—	1913.	1914.	1915.	1916.
Tons produced	2,788	1,068	1,602	2,051
Acres under cultivation ..	3,397	3,199	6,315	2,946

Maize grows well in the drier parts of the group, especially in the districts of Mba and Nandronga; but as it is not a staple food of the people of Fiji, it is doubtful whether its cultivation will progress.

Oil-producing Plants.—Both candlenuts and ground-nuts flourish, and a sample of ground-nut oil from Fiji was sold in England at the rate of £30 a ton. Ground-nuts in 1913 occupied 49 acres, and 282 tons were produced; but only 8 tons were produced in 1914, though 61 acres were under cultivation. Castor-oil seed was found to give the good average of 50 per cent. of oil. Other oils which can be produced are vetiver oil (from *Veteveria zizanoides*), and the oil of *Cymbopogon* *coloratus*, which has the qualities of citronella and lemon-grass oil. These are suitable for perfuming soaps and similar purposes, and "would find a ready market in Europe if they could be produced on a large scale."

Resins.—A varnish resin from the *Dammara vitiensis* was found to equal Manila copal and to be worth 35*s.* per cwt.

Rice is extensively cultivated by the Indians, and with more modern methods a great deal might be produced for local use. The amount produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	29,287	14,171	18,157	23,726
Acres under cultivation ..	13,508	12,243	14,195	17,190

Rubber grows best in the districts of Namosi and Suva, and conditions are favourable for the cultivation of both the Para and the Ceara species. In 1913 there were 1,760 acres under rubber. In 1914 1,849 acres were planted, and many of the plantations had reached the tapping stage; while in 1915 the acreage rose to 1,906 and the amount produced was 28,669 lb. The industry should prove successful, especially in view of the fact that rubber suffers less from hurricanes than other crops.

Spices.—Almost all the chief spices, ginger, pepper, nutmeg, cloves, cinnamon, vanilla, pimento (allspice) and turmeric, have given good crops, and their cultivation is increasing.

Starch-producing Plants.—Samples of starch from cassava and arrowroot have been highly commended.

Sugar.—This crop holds easily the first place among the exports. It is grown on alluvial flats and on the banks of the larger rivers, the chief centres being on the Rewa and Mba rivers in Viti Levu and around

Lambasa in Vanua Levu. In fact, the whole west coast of the former island is devoted to it. The amount produced and the area under cultivation in the years 1913-16 are shown by the following table:—

—	1913.	1914.	1915.	1916.
Tons produced	736,992	874,164	883,883	830,377
Acres under cultivation.. ..	48,208	62,852	62,308	55,570

The chief interest is held by the Colonial Sugar Refining Company, of Sydney. This firm is said to have put no less than £30,000,000 into the industry. It has control of the greater part of western Viti Levu and possesses four mills, each capable of turning out between 15,000 and 25,000 tons of sugar a year. Gradually it is leasing out its plantations, especially to its ex-employees, so as to induce selected planters to settle in the colony, while independent planters contract to grow cane for its mills. The number of Indians taking to cane cultivation after the completion of their term of indenture is steadily increasing. The Vancouver-Fiji Sugar Company and the Melbourne Trust Company also have large estates and a mill each.

Tanning Materials.—Samples of mangrove extract were reported to be too dark for tanning leather, but the extract could be used for dyeing fishing-nets, sails, &c., and was said to be worth £14 per ton (c.i.f. Liverpool).

Tea.—The Wainunu tea estate in Vanua Levu was planted in or about 1889. The tea it produces is described as resembling Indian teas in its richness in extractive matter, and China tea in being rather low in caffeine. The amount of tea produced each year from 1913 to 1916 was about 50,000 lb., the area under cultivation being 200 acres.

Tobacco.—A considerable amount of tobacco is grown for local use, Nandronga being the district most suitable to it. A fine Sumatra leaf has been produced for the outer wrapping of cigars, and a few years ago a New Zealand firm set up a branch establishment at Suva with a view to export, but the experiment was unsuccessful and operations were suspended. The amount produced and the area under cultivation in the years 1913-16 were as follows :—

—	1913.	1914.	1915.	1916.
Tons produced	37	27	60	129
Acres under cultivation ..	114	103	121	138

Yams are grown for domestic use. The amount produced and the area under cultivation in the years 1913-16 were as follows :—

—	1913.	1914.	1915.	1916.
Tons produced	252	334	292	239
Acres under cultivation ..	313	275	255	245

Live-stock.—Cattle, horses, and goats thrive in the islands; there are many excellent grazing districts, and disease is rare. The following table shows the numbers of stock in the colony in the years 1913-16 :—

—	1913.	1914.	1915.	1916.
Horses and mules ..	6,726	7,032	7,434	7,343
Horned cattle	49,413	52,585	58,773	50,309 ×
Sheep	3,219	2,662	1,982	1,468
Goats	14,393	15,659	12,130	11,452

(*b*) *Methods of Cultivation*

The Agricultural Department has a station at Nasinu, 9 miles from Suva, in the wet district; that at Lautoka has been abandoned. Plants are supplied to planters free of cost; experiments in the cultivation of rubber, coffee, &c., are carried on; and a cotton gin, a fibre machine, &c., have been established.

(*c*) *Forestry*

There is a large amount of valuable timber in the islands,[1] but hitherto, so far from there being an export trade, it has been necessary to import a great part of the timber required. The Government has now taken the matter in hand. Recent ordinances provide for the constitution of village forests, the issue of licences to cut timber in such forests, the appointment of forest officials, and so forth. Moreover, a sawmill has been set up by the Pacific Lumber Company of Canada on the Ndreketi river in Vanua Levu for the purpose of dressing timber for export, and there are in the islands three other sawmills, two of which are at Suva. Fiji should therefore soon be independent of outside supplies of timber.

(*d*) *Land Tenure*

The total area of the colony, including Rotumá, is estimated at 4,532,800 acres, of which 504,280 were reported to be granted out in 1916 and 119,691 to be under cultivation.

The problems relating to land tenure in Fiji are very difficult, and have excited controversies of the fiercest kind. There is no need to do more here than to refer to them very briefly. The main problem from the point of view of the economic future of Fiji is to ascertain how far the existing land system is responsible for the fact that the cultivated area of the colony is only an infinitesimal proportion of what it might be. After the cession of the islands in 1874, the land remained in the possession of the natives on the old communal basis. Although the land passes generally "direct from father to son, or brother to brother, the actual heir is only the representative of a group of agnates, who are heirs with him and can deprive him if he misbehaves." Holdings are registered by the Native Lands Commission not according to individuals, but according to *matangali* or clans.

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[1] A complete list of specimens of Fijian timber will be found in the *Handbook of Fiji*, Appendix V (1908).

Thus the sale or lease of land was beset by almost insuperable difficulties, at a time when the native population was progressively decreasing, when the communal system was itself becoming obsolete, the authority of the chiefs decreasing, and the *lala* or service tenure being less and less willingly performed, and when the conditions of society were being still further complicated by the advent of the Indians.

The remedy was found by Sir Everard im Thurn, who by the Native Lands Ordinance, approved by the Legislative Council in 1904, consolidated and amended the law relating to native land tenure. The effect of this ordinance was to allow the natives, under proper restrictions, to sell or lease their waste or unused lands. Since that date an increasing amount of land has, with the consent of the natives concerned, passed into the hands of the Crown, to be leased out on behalf of the owners. The rent is at the rate of 3*d*. an acre for the first five years, 6*d*. for the second five, 9*d*. for the third, and 1*s*. thereafter; the lease is for 99 years. The policy has been most successful, and, as mentioned above, the lands at present granted out amount to more than 500,000 acres. It is, however, necessary to observe that the system is generally unpopular with the European settlers, who would prefer to obtain the land freehold. Moreover, the difficulties arising out of the complications of title have been by no means solved, and enquiries are still being made by the Native Lands Commission.

(3) FISHERIES

Both sea and fresh-water fish are abundant. Turtles are found round all the islands.

Bêche-de-mer is exported in fair quantities for the Chinese market.

A certain amount of pearl shell and turtle shell figures among the exports, but the most lucrative shell is the *trochus* or *sithi*, which is abundant on the reefs. There is a large market for this in France and Japan, where it is used for button-making.

(4) MINERALS

It is improbable that Fiji will ever be a mineral-producing area, and though many traces have been found of gold, silver, copper, iron, coal, antimony, malachite and graphite, it does not appear that these minerals exist in paying quantities. A mining adviser reported in 1909 that there was no remunerative alluvial ground in the islands, though the gravel in certain rivers was auriferous in places. In the same year the Imperial Institute reported that a specimen of copper ore submitted to it contained over 40 per cent. of copper, yielded 2 oz. 16 dwt. of gold and 3 oz. 11 dwt. of silver per ton, and was valued approximately at £30 per ton. The Institute also examined some marls (colloquially described as soapstone) and reported that they would be useful either as pozzuolana for the production of hydraulic cement, or for marling and claying sandy soils.

The mining regulations of Fiji are based on Ordinance 13 of 1908, which makes provision for licensing prospectors and enacts that prospecting licences shall be limited to two years from the date of issue, and extend over not more than 10,000 acres. A considerable number of such licences have been applied for and granted, but, as has been already said, the results have been negligible.

(5) MANUFACTURES

Apart from the production of sugar and copra the sole manufacture of importance is boat-building. There are 6 sugar mills with a normal daily output of 667 tons in all; 4 fibre mills, including a desiccated coconut factory at Levuka, and 22 boat-building yards. At Ndavetu (Wainunu) there is a tea factory, where the normal daily output of dried tea is 400 lb. There are 2 rice mills, one at Suva, the other at Nandronga, 2 soap works, and 4 sawmills.

The manufacture of colonial distilled spirit, which used to be one of the chief industries, has disappeared, as the result of the imposition of heavy duties in the Commonwealth, and the large distilleries at the Nausori Mills have been closed. Recently the manufacture of bricks has been undertaken at Suva, but has not proved a success.

(C) COMMERCE

(1) Foreign Interests

Although before the war more than 90 per cent. of the trade of Fiji was in British hands, it cannot be said that there was no fear of rivalry. Competition was threatened from both German and American quarters. It is difficult to obtain a true estimate of German interests in the colony, since to a great extent the Germans worked indirectly. A proportion of the imports from British possessions, especially from Sydney, were German goods trans-shipped. Not only did German-Australian firms, such as Justus Scharff & Co., forward these goods, but it is even reported that some British shipowners carried German cargoes at a lower rate than British, and that 25 per cent. of the goods shipped by Australian merchants to Fiji were of German origin. There were also many German firms or their agencies in the islands themselves, and the Germans were said to have a monopoly of trade in hollow-ware, lampware, enamelware, scents, and cashmeres, and a large share of that in cutlery. The trade was pushed by the usual German methods—a supply of cheap and outwardly attractive articles to customers who preferred cheapness to quality, the institution of through shipping and railway rates, of bills of lading, and prodigiously long credit. The development had, in fact, reached the point when the Norddeutscher Lloyd judged the time ripe to extend to Fiji their line from Singapore to Rabaul, and the arrangements were stopped only by the outbreak of war.

Before the war the Germans were said to take 60–70 per cent. of the copra produced in the Pacific. It appears likely that in this respect the Americans will take their place. An American line of steamships to run between Sydney and San Francisco had already been projected with special reference to this traffic; and, since the outbreak of war, new mills have been erected and plant extended in America, and the imports of copra have enormously increased. In 1915–16, one firm alone employed in this trade 15 American schooners of 600 tons each. These vessels bring American goods, especially canned fruit and biscuits, and these, owing to heavy war freights, are cheaper than goods shipped from Australia. The Vacuum Oil Company, an American firm, has a warehouse at Suva and trade connections with all the islands of the Western Pacific as far as Papua, its head Australian office being at Melbourne. No Japanese firm has so far been established in Fiji.

(2) FOREIGN TRADE

The following table shows the share taken by various countries in the foreign trade of Fiji in 1917:—

Country.	Percentage of Total Trade.	
United Kingdom..	—	4·34
British Possessions—		
New Zealand ..	38·5	80·84
New South Wales	29·59	
Canada	6·84	
Victoria	4·66	
Others	1·25	
Foreign Countries—		
United States ..	12·59	14·22
Japan	1·2	
Others	0·43	
		99·4

The remaining 0·6 per cent. consists of imports entering by parcels post.

(*a*) *Exports*

The total value of the exports, including bullion and specie, in the years 1911-14 was as follows:—

Year	£
1911	1,276,208
1912	1,058,960
1913	1,425,940
1914	1,390,979

The values of the principal articles exported during the same years were as follows:—

——	1911.	1912.	1913.	1914.
	£	£	£	£
Bêche-de-mer	569	1,173	1,766	2,831
Coconuts	769	641	540	960
Copra	294,245	242,073	176,741	148,372
Fruit (fresh)	151,668	120,510	168,249	201,938
Hides and skins	1,539	1,480	1,007	1,848
Maize	2	145	1,730	1,375
Molasses	9,821	7,259	10,477	7,323
Pearl shell	61	305	1,256	683
Sugar	79,274	671,713	1,041,927	1,005,643
Timber	—	1,170	1,070	260
Trochus shell or *sithi*	14,252	7,573	13,792	13,244
Turtle shell	1,934	2,087	2,927	128

The three chief products of Fiji—sugar, copra and green fruit—contributed in 1917 no less than 97 per cent. of the total exports.

Before the war practically the whole of the exports went to British possessions, principally to Australia and New Zealand. The exports between 1911 and 1914 were divided as follows among the various countries:—

——	1911.	1912.	1913.	1914.
	£	£	£	£
United Kingdom	—	45,700	41,048	24,235
British Possessions	1,274,581	1,010,925	1,375,371	1,310,236
Foreign Countries	1,627	2,335	9,521	56,508
Total	1,276,208	1,058,960	1,425,940	1,390,979

Since the outbreak of war there has been an increase in the exports to Canada, and a tremendous rise in the exports to the United States. The value of the latter has risen from £2,625 in 1913 to £318,731 in 1917.

(b) *Imports*

The chief articles of import are foodstuffs and drapery. Before the war the value of the imports was steadily rising, owing to the greater purchasing power possessed by the natives, in consequence of the high prices obtained for copra and the increased output of green fruit. The fact that the imports of machinery have more than doubled in the last ten years also witnesses to the economic progress of Fiji. The following table shows the values of the imports in the years 1911-14:—

—	1911.	1912.	1913.	1914.
	£	£	£	£
Bags and sacks ..	25,968	26.871	37,966	49,527
Beer, wine and spirits	20,956	23,267	21 238	24,273
Books and stationery..	9,616	9,724	8,749	10,131
Clothing	156,309	156.747	113,290	146,848
Coal	28,684	25,891	25,940	27,359
Foodstuffs	146.755	185,595	163,565	145,314
Glass, hardware, cutlery	66,915	66,371	74,200	66,772
Iron and galvanised iron goods ..	45.659	42,387	42,511	34,157
Live-stock .. .	14,681	13.219	9,890	14,390
Machinery	49.323	36,081	54,615	54 249
Manure	7.221	11,628	14,379	22,209
Oils	20.470	33,268	29,026	28,821
Timber	47,535	45,106	57,640	50,681
Tobacco, cigars, &c. ..	13,569	14,454	12,716	14.508
Bullion and specie ..	102,886	37,250	61,230	33,782
Miscellaneous ..	200,532	212,185	177,013	204,217
Total	957,079	940,044	903,968	927,238

In the year 1912 the Receiver-General reported that "speaking generally, the proportion of British manufactured goods to the total imports was exceedingly high in Fiji," there being few, if any, direct means of communication with non-British countries. He stated, further, that most of the trade was in the hands of British subjects, and that, owing to considerations of convenience, foodstuffs would always come from Australia or from New Zealand, the only possible competitor being India. As regards manufactured goods, he reported that there was a growing tendency to buy in the cheapest markets, from Germany, Belgium, the United States, Sweden, and Japan. The United States provided agricultural implements, oil engines, boots, wooden ware, oars, lamps, paper bags, petroleum products, &c. Germany sent sewing machines, cheap jewellery, perfumery, buttons, toys, pianos, beer, wire nails, fencing wire, lamps, wooden pipes, fancy goods, and common tools. Japan sent cheap undershirts, hosiery, camphor, brushware, and silk manufactures. Matches came from Sweden. The United Kingdom provided about 25 per cent. of the boots, 40 per cent. of the cutlery, 50 per cent. of the drapery, 20 per cent. of the furniture, 15 per cent. of the galvanised iron, 35 per cent. of the glassware, 20 per cent. of the hardware, 30 per cent. of the jewellery, 40 per cent. of the agricultural machinery, and 50 per cent. of the paints.

The following table shows the sources of the imports in the years 1911-14 :—

Country of Origin.	1911.	1912.	1913.	1914.
	£	£	£	£
United Kingdom ..	164,636	184,862	152,998	185,711
British Possessions ..	699,878	663,497	671,774	633,271
Foreign Countries ..	92,565	91,685	79,196	92,292
By Parcels Post ..	—	—	—	15,964
Total	957,079	940,044	903,968	927,238

(D) FINANCE

(1) *Public Finance*

The following figures show the amounts of the revenue and expenditure of Fiji for the years 1911-16 :—

Year.	Revenue	Expenditure.
	£	£
1911	240,395	265,347
1912	283,947	251,744
1913	266,031	258,793
1914	279,845	301,351
1915	273,635	282,831
1916	317,446	292,905

The total amount of public debt outstanding in Fiji in 1916 was £37,415.

The following table shows the budget for 1916:—

Revenue.		Expenditure.	
	£		£
Customs	182,638	Charges on account of Public Debt ..	22,323
Port and Wharfage Dues	13,202	Pensions	9,924
Native Taxes ..	15,797	Governor and Legislature	4,225
Licences, &c. ..	40,351	Colonial Secretary ..	4,248
Fees	36,796	Native Department ..	8,428
Post Office	16,037	Treasury Department ..	4,961
Rent of Government Property	5,473	Customs Department ..	5,763
Interest	4,786	Audit Department ..	2,110
Land Sales	281	Port and Marine Dept.	4,416
Miscellaneous ..	2,085	Lands	4,602
		Legal Department ..	19,233
		Constabulary Dept. ..	13,445
		Prisons Department ..	7,024
		Medical Department ..	20,376
		Hospital and Asylums..	11,265

Revenue.		Expenditure.	£
		Education	3,731
		Transport	5,436
		Defence Forces ..	1,507
		Post and Telegraph Department ..	25,558
		Agricultural Department	4,464
		Immigration . ..	5,351
		Government Printing Office	4,027
		Works Department Establishment ..	16,111
		Public Works (recurrent)	21,207
		Public Works (extraordinary)	16,495
		Expenditure against Loan Account ..	21,138
		Miscellaneous ..	25,537
Total ..	.. £317,446	Total .	.. £292,905

The taxes include duties on imported goods, licences, wharfage dues, and a building tax on all buildings rated on an annual value of 2*s*. or over, in addition to a native tax, assessed annually, of 10*s*. to £1 per male adult, varying by district and paid in copra or cash according to arrangement.

The customs duties are defined by Ordinances 17 of 1912 and 7 of 1916. They are based partly on an *ad valorem*, partly on a specific scale. There is a 12½ per cent. *ad valorem* duty on sugar, fish, preserved fruits, drugs, arrowroot, motorcars, bicycles, firearms, cartridges, drapery, boots, stationery, perfumery, furniture, enamelled ware, leather goods, lamps, asbestos, and rope; and of 5-7½ per cent. on machinery. There is a specific duty of 2*s*. 6*d*. per dozen pints on ale, beer, &c., 2*s*. 6*d*. per gallon on wine, 9*d*. per gallon on oil, 4*d*. per lb. on tea, and £1 per ton on pig iron. There is also a war export tax of 5*s*. per ton on sugar. Certain articles are exempt.

(2) *Currency*

The legal tender and the only coin in circulation is the English sterling. There are no returns as to the number of coins in circulation. In 1916 there was in circulation £61,993 of paper money issued by the Colonial Government and £18,776 issued by private banks. The Government Currency Notes Ordinance of 1913 provides for the issue of Government currency notes; the Commission of Currency fixed the value of the notes issued at £20,000.

(3) *Banking*

There are two private banks in the Colony:—

The Bank of New Zealand, with branches at Suva and at Levuka. Its deposits in the colony in 1916 amounted to £208,440. The Bank of New South Wales, with branches at Suva, Levuka and Lautoka. Its deposits in 1916 amounted to £504,641. Both of these banks have private note issues, which, however, are not officially recognized.

There are now nine Government savings banks in the colony. The head office is at Suva, and there are branch offices at Lautoka, Levuka, Loma Loma, Lambasa, Makongai, Nandronga, Nausori, and Savu-Savu. In 1916 the depositors numbered 1,073.

VII. THE TONGA ISLANDS PROTECTORATE

(A) MEANS OF COMMUNICATION

(1) *Roads*

The road system of the Tonga Islands is still very primitive. Most of the main roads are unmetalled and become all but impassable in the rainy season. This state of things has greatly retarded the development of the islands, and a beginning has now been made, especially in Tongatabu, with attempts to remedy it.

(2) *Posts*

The Tonga Islands are not in the Postal Union and the Government is reported to pay no subsidies to the shipping lines providing mail services and to expend a negligible amount on the local conveyance of mails. There is a money order system with a convention with Australia, New Zealand, and Fiji, but with no other countries. In 1911 the revenue of the Post Office amounted to £909 and the value of money orders issued to £12,373. Telegraphs and telephones do not exist.

(3) *Ports*

There are not many really good harbours in these islands, though there are many possible anchorages off all except the volcanic islands.

The best harbour is that of *Nukualofa* in Tongatabu, which has two passages through the reef and secure anchorage. It has a ferro-concrete jetty with 23 feet of water alongside, and a tramway. The average value of the imports of this port for the years 1909-13 was £74,965, and of the exports £68,025.

During 1913 twenty-one British vessels, with a total tonnage of 36,129, entered the port, and seventeen, with a total tonnage of 29,772, cleared. One American sailing ship of 693 tons entered.

In the Haabai group there is a poor harbour at *Pangai*, on Lifuka Island, which is the residence of the Governor of the group and a port of call for mail steamers. The harbour is reported to be buoyed. The average value of the imports of Pangai for the years 1909-13 was £35,708, and of its exports £63,641. During 1912 one American sailing ship of 683 tons entered and cleared, one German sailing ship of 37 tons entered, and one Norwegian sailing ship of 799 tons cleared.

In the Vavau group the chief port is at *Neiafu*, where the mail steamers call. The harbour is landlocked, but small and deep (25-29 fathoms); there is a wharf with 3 fathoms of water alongside. The average value of the imports of Neiafu for the years 1909-13 was £38,537, and of its exports £68,741. Fifteen steamers of 28,316 tons entered in 1913 and fourteen of 27,616 tons cleared. All these vessels were British.

(4) *Shipping*

There is a regular monthly mail service with Australia and New Zealand by the steamers of the Union Steamship Company of New Zealand, which call every fortnight at the three chief ports. This company also provides practically all the local services. It receives no subsidy from the Tongan Government beyond remission of pilotage and shipping dues. The outlying islands, such as Niuatobutabu (Keppel Island), are served intermittently by trading schooners from Auckland and small steamers from Samoa *via* Vavau.

The following table shows the shipping which entered the ports of the Tonga Islands during the years 1911 to 1915:—

—	British.		Foreign.	
	No.	Tonnage.	No.	Tonnage.
1911	52	103,045	4	2,278
1912	40	66,171	5	1,075
1913 ..	31	58,009	1	683
1914	31	56,742	2	732
1915	17	23,640	—	—

(5) *Cable and Wireless Communications*

There are no cable or wireless communications at present. In 1914 the Government was projecting a wireless station at Tongatabu, to be worked in connection with the wireless system of Fiji and possibly of New Zealand.

(B) INDUSTRY

(1) LABOUR

Labour is scarce, unskilled and expensive. The cost of living and the rate of wages are both high, four shillings a day being demanded for unskilled labour. An adequate supply of labour from without is, however, an urgent necessity if the islands are to be developed to anything like their proper capacity.

(2) AGRICULTURE

The Tonga Islands are essentially agricultural, but their resources are far from being properly developed. There is reported to be no opening for the investment of capital, and large areas of land for plantation purposes are not available. "With the exception of a few small plantations leased to foreigners," wrote the Resident Agent in 1909, "agriculture is confined to the cultivation of food crops, *i.e.*, yams and *taro* and sweet potatoes. The cultivation of coconuts and fruit, the principal articles of export, is not systematically followed by the natives. The increased exports for 1909 are due to the favourable season rather than to the assiduity of native cultivation."

The Government is awakening to the necessity of providing technical education; and a Government college has been founded, where agriculture is taught on a scientific basis. In 1913 it had 157 students. An agricultural station has been formed at Vaikeli, four miles from Nukualofa, and an agricultural department inaugurated.

(*a*) *Products of Commercial Value*

Candlenuts.—The seeds of the candlenut tree (*Aleurites triloba* or *moluccana*) provide an excellent oil used for soap-making in England and on the Continent.

Copra.—This is the only article exported in any quantity. Before the war about 25 per cent. of the total export went to Europe, a small quantity to New Zealand, and the remainder to Australia. The coconut has been called "the mainstay of local prosperity." Its importance is at last being recognised by the Tongan Government, and by an ordinance of 1913 every male Tongan subject is required to plant at least 200 coconuts on his tax allotment within one year of the date of registration. Coconuts in Tonga cost about £9 per acre to plant and they bear in six or more years. The frequency and the violence of hurricanes are a great hindrance to the prosperity of the industry. In 1913, for example, owing to a disastrous hurricane in the early part of the year, the export of copra dropped to 3,427 tons, whereas in 1912 the export had been 11,120 tons.

Cotton.—The climate and soil of the islands are reported to be well adapted to the establishment of a successful cotton industry, but little has been done so far.

Fruit.—In order that the islands should be less dependent on the coconut industry, it is important that the fruit trade, which at present is but small, should be increased. Bananas and oranges flourish, and pineapples are now being grown. The cost of planting bananas is estimated to be about £11 an acre and the plants will bear in about fifteen months. The grape was not a success.

Fungus.—A certain amount of the edible fungus dear to Chinese mandarins is collected for export.

Tobacco.—Tobacco is grown for local consumption. It is made into *sulukas*, or cigarettes of leaf tobacco wrapped in plantain leaves.

(*b*) *Land Tenure*

All land belongs to the King, who may at pleasure grant one or more hereditary estates to the nobles and titular chiefs or *matabules*, who in their turn assign portions to their followers. The latter are entitled to two holdings, a town site and an allotment of about 8½ acres for foodstuffs. The sale of land is forbidden, but foreigners may obtain leaseholds in blocks of 100-200 acres up to 50 years, at a rental of 4-6 shillings an acre. The average cost of clearing land is estimated at about £15 per acre.

(3) FISHERIES

The waters of Tonga abound in fish, which could easily "be caught, dried, pressed, salted, and perhaps exported by any community less favoured by nature and possessing a fair amount of energy and enterprise." As it is, a large amount of fish is imported.

The whaling industry could also be developed. A small amount of whale oil is now exported, but much more could be secured.

(C) COMMERCE

(1) *Foreign Interests*

Before the war trade was in either British or German hands. The German share was large and growing, especially in drapery, through German firms in Samoa and Fiji. "This is easily accounted for, since German merchants and their travellers take more interest locally in the requirements of their customers, as regards price, quality, and pattern." The Deutsche Handels- und Plantagen-Gesellschaft had a sub-agency in Tonga.

Since the war American competition has taken the place of German; the conditions are the same as in Fiji (see p. 102).

(2) *Exports*

The principal exports from the Tonga Islands are copra, fruit, live-stock, fungus, whale oil, and candlenuts. The following table shows the values of the exports in the years 1911-14:—

—	1911.	1912.	1913.	1914.
	£	£	£	£
Candlenuts	—	172	3,324	—
Copra	231,479	209,067	72,480	67,304
Fruit	5,545	1,379	2,008	443
Fungus	356	268	1,093	957
Live-stock	730	1,469	920	701
Whale oil	203	125	400	—
Specie	—	—	600	—
Miscellaneous ..	1,791	4,032	1,495	3,631
Total	240,104	216,512	82,320	73,036

The bulk of the exports go to Australia, which took goods in 1912 to the value of £134,636, and in 1913 to the value of £47,402. Germany was before the war the most important European purchaser, taking in 1912 goods to the value of £57,199, and in 1913 to the value of £23,494.

The following table shows the value of exports which went to British possessions[1] and to foreign countries in the years 1911-14 :—

Destination.	1911.	1912.	1913.	1914.
	£	£	£	£
British Possessions ..	184,209	154,891	55,482	63,477
Foreign Countries ..	55,895	61,621	26,838	9,559
Total	240,104	216,512	82,320	73,036

(3) *Imports*

The principal imports to the Tonga Islands are foodstuffs and clothing. The following table shows the values of the imports, including specie, in the years 1911-14 :—

——	1911.	1912.	1913.	1914.
	£	£	£	£
Beer and spirits ..	2,927	3,762	1,611	1,960
Clothing	45,743	32,478	14,433	24,160
Foods ..	50,175	53.686	28,951	27,188
Iron goods and hardware	14,897	15,881	7,270	5,440
Timber	13,702	11,898	4,657	4,124
Specie	40,979	23,540	1,700	4,870
Miscellaneous .	54,678	51,768	24,122	29,700
Total	223,101	193,013	82,744	97,442

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[1] Exports to the United Kingdom (if any) are included under Foreign Countries.

New Zealand was the chief source of supply, sending in 1911 goods to the value of £85,635, in 1912 to the value of £82,826, and in 1913 to the value of £41,718. In corresponding years the value of goods imported from Australia was £52,870, £50,045, and £20,443. The imports from Germany in 1911 amounted to £17,466, in 1912 to £14,743, and in 1913 to £9,586. The total value of imports from British possessions and from foreign countries in the years 1911-14, excluding bullion and specie, was as follows :—

Origin.	1911.	1912.	1913.	1914.
	£	£	£	£
British Possessions ..	151,112	140,999	65,220	78,833
Foreign Countries ..	31,010	28,474	15,824	13,739
Total	182,122	169,473	81,044	92,572

(D) FINANCE

(1) *Public Finance*

Although the finances no longer present the *opéra bouffe* spectacle which Sir Basil Thomson described in his *Diversions of a Prime Minister*, they do not yet rest on a wholly sound basis. "Failure to adhere to the programme laid down when the estimates were framed, the absence of proper supervision and the employment of unskilled labour at high wages have resulted in votes for Government buildings being considerably exceeded." Such is the report for 1910 on one important item of expenditure, and, though matters have improved since then, there is still room for amendment.

The following table shows the revenue and expenditure for the years 1911–12—1915–16.

Year.[1]	Revenue.	Expenditure.
	£	£
1911–12	51,050	50,011
1912–13	43,938	38,497
1913–14	32,489	39,103
1914–15	36,114	36,414
1915–16	30,037	43,086

The excess of assets over liabilities on March 31, 1915, was £17,180.

The details of the budget for 1912-13 were as follows:—

Revenue.		Expenditure.	
	£		£
Customs	20,809	King	2,694
Taxes	11,192	Legislative	1,968
Port and Wharfage Dues	1,844	Premier	1,630
Licences and Internal Revenue	3,300	Governors	481
Fees, &c.	3,351	Audit Department ..	824
Post Office	721	Treasury	841
Rents and Interest ..	2,058	Customs and Post Office	3,117
Miscellaneous ..	663	Lands	5,134
		Justice	1,644
		Police	4,784
		Education	3,441
		Medical Department ..	3,484
		Works Department	333
		Public Works (recurrent)	1,101
		Public Works (extraordinary) ..	4,436
		Miscellaneous ..	2,585
Total ..	£43,938	Total ..	£38,497

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[1] Ending on March 31.

(2) *Currency and Banking*

British coin is the only legal tender. Lever Brothers are endeavouring to secure banking facilities, which do not as yet exist.

VIII. BRITISH LINE ISLANDS

MALDEN ISLAND

Anchorage and landing are bad. There are a small pier and a tramway for the phosphate traffic.

The labour is provided by natives of Aitutaki, in the Cook Islands, and of Niué.

The water supply is precarious, but there are large storage tanks for rain.

In 1912 phosphate to the value of £4,644 was exported to Australia. The export to New Zealand for that year amounted to £13,311, and the imports from New Zealand to £419.

CHRISTMAS ISLAND

There is fair anchorage on the west side, but landing is difficult. Small craft can enter the lagoon.

The island was leased in 1902 for 99 years to the Pacific Plantations Company, who have replanted it with coconuts.

FLINT ISLAND, CAROLINE ISLAND, AND VOSTOK ISLAND

There are indifferent anchorages on the lee side of the islands. Landing is difficult.

The islands are leased to the firm of S. R. Maxwell & Co., of Tahiti, who are planting them with coconuts.

STARBUCK ISLAND

Landing is very difficult. The island has deposits of phosphate, which have been worked at intervals.

JARVIS ISLAND

There is no anchorage, and landing is made through a gap in the reef. The island has large deposits of phosphate.

IX. PITCAIRN AND ADJACENT ISLANDS

PITCAIRN ISLAND

(A) MEANS OF COMMUNICATION

(1) *Ports*

There is uncomfortable anchorage in Bounty Bay on the east side of the island, but during east winds it is necessary to lie off or anchor on the west side. In both cases landing is difficult and dangerous.

(2) *Shipping*

The communications are uncertain. Between 30 and 40 vessels visit the island in the course of a year. A report to the High Commissioner in 1904 suggested that if the inhabitants owned a vessel they could export their products to Tahiti. In 1908 they did so.

(B) INDUSTRY

The soil is fertile, and the island could grow much more than it now does, especially if the water supply were improved. Coconuts are produced which are suitable for the manufacture of copra. The chief product of economic value is arrowroot, which is stated to be of excellent quality. It is thought that with proper machinery and appliances 250 tons a year could be produced. Coffee also grows luxuriantly, and could easily be made a source of profit. The fruit trade in bananas, oranges, and pineapples could also be developed, if regular transport were available.

Wild goats and fowls exist. At one time there were many pigs, but it appears that the inhabitants, who are Seventh Day Adventists, have disposed of these animals on religious grounds.

The people are described as narrow-minded and lacking in energy and intelligence. Their methods of cultivation are very primitive.

OENO ISLAND, HENDERSON ISLAND, AND DUCIE ISLAND

There are no anchorages, and landing is dangerous. Oeno and Henderson Islands grow coconuts and a few oranges and lemons. Ducie Island is quite barren.

GENERAL REMARKS

THE various groups of islands comprising British Oceania differ so widely that it is difficult to make any statements applicable to them all. It is impossible, for instance, to group together for consideration the Tonga and the Solomon Islands, the former inhabited by a highly advanced native race who have accepted Christianity and the latter by naked savages scarcely beyond the head-hunting stage of development. In strictly economic matters the divergency is equally plain. The trade of the various groups seems destined to be diverted into wholly different channels. That of the Solomons will probably continue to be directed by the Commonwealth; that of the Gilbert and Ellice Colony is likely to turn towards Japan or Singapore; that of Fiji and Tonga, at any rate in part, to the United States and Canada. Some groups—for example, the Gilbert and Ellice Islands—are capable of producing little else than copra: others, such as the Solomons, could, with a proper labour supply, furnish almost any tropical product—cotton, rubber, sugar, tobacco, and the most valuable of the fibre and oil-bearing plants. In some, minerals are found; in others, the timber or the fisheries are of value. Even the smallest outlying islands vary in their uses. Some have harbours, others possess pearl shell or phosphate beds. They are for the most part alike in producing copra and *beche-de-mer*.

In view of these differences, all that can be done is to summarize here the information which has already been given separately for each island or group. The first noteworthy point is that the internal communications in most of the groups are still backward, and in the Solomons are non-existent. A good road system, and in Fiji a railway system, is important for the development of the fruit trade generally, and especially the banana trade. Of all the groups the Solomons alone have good harbours, but these are at present almost unused. In the islands with reefs, almost without exception, harbour accommodation is bad or non-existent. It would be possible, in some cases, to blast boat passages through the reef, as has been done at Niué. Through lack of such passages the fruit-bearing islands of the Cook group, which are among the most fertile in the Pacific, are hopelessly backward. On the other hand Suvarov, with one of the finest harbours in the Pacific and admirably suited for a coaling station, is neglected and uninhabited.

The shipping facilities vary enormously. Some islands, such as Fiji, have frequent communications not only with Australasia but also with America. Others see a vessel only four or five times a year. In most of the groups the inter-insular services are fairly adequate; but, if the natives are expected to prepare an amount of copra proportionate to the available supply, and if the fruit grown is to be exported in the best condition, more frequent services are necessary. It is probable that in the near future the exigencies of the copra trade with the United States and of the fruit trade with Canada will bring about a great improvement in distant communications. The western groups are probably destined to see a considerable development of their trade with China and Japan, and also with India, either through Singapore or through Rabaul.

In none of the groups is there a wholly adequate supply of labour, though the exact nature of the labour problems varies from group to group. The deficiency is least serious in the Cook Islands and in the Gilbert and Ellice Colony. In Fiji the problem has been partially solved by the introduction of coolie labour from India. In the Solomons it has not been solved at all, and this group, though perhaps the richest of all, is practically undeveloped.

The most profitable article of commerce in all the groups is the coconut. The copra trade could almost everywhere attain far greater dimensions; in the Cook Islands it might increase to five times its present volume, and in the Solomons it could be trebled. A new and perhaps almost an exclusive market for this product is promised by the great advance in the American demand. The fruit trade of all the groups except the Gilberts is developing rapidly, not only with Australia and New Zealand, but also with Canada. The problem here is chiefly the inadequacy of communications and of labour supply. It has been noted of late, both in Fiji and in the Cook Islands, that as the banana exhausts the soil and is liable to be damaged by hurricanes, there has been a tendency to abandon its cultivation in favour of citrous fruits and vegetables, especially tomatoes. Sugar is confined to Fiji, but it could equally well be produced in the Solomons. Cotton and rubber of excellent quality can be produced in many of the groups, also tea, coffee, cocoa, spices, fibres, especially sisal hemp, and the products of oil-bearing plants, such as candlenuts, ground-nuts, and soya beans.

The timber supply of Fiji and of the Solomons is almost inexhaustible; but little has been done to develop it, and the erection of sawmills is urgently needed. The fisheries could in many parts be made more profitable if canning and preserving plant, such as has been established in Norfolk Island, were made more general. In Norfolk Island and Tonga the whaling industry has been neglected. Minerals are not found except in Fiji and the Solomons, and even there it is doubtful whether they exist in paying quantities. In the whole of British Oceania the only mineral product which is regularly worked is the phosphate of Ocean Island and, since the war, Nauru. Excepting the production of sugar and copra, the sole manufactures of the islands are the making of hats and the building of boats.

Foreign trade before the war was almost entirely in British hands, and by far the greater part was absorbed by Australia and New Zealand. German trade was pushed by German merchants in Fiji or from Sydney, or in the German possessions, especially Samoa, and by great German firms such as Hernsheim & Co., while the Norddeutscher Lloyd was preparing to extend its activities both to Fiji and to the Solomon Islands. Since the outbreak of war the Americans and the Japanese have been trying to take the place of the Germans, the former in copra traffic, especially in the Eastern groups, the latter in the Western groups, and especially in the Gilberts.

AUTHORITIES

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The French island possessions in the Pacific, with their approximate land areas in square miles, are as follows:

New Caledonia and Dependencies:	
New Caledonia and Huon Islands	6,274
Isle of Pines	60
Chesterfield Islands	3
Loyalty Islands	800
Hoorn Islands (Futuna)	61
Wallis (Uea) Island	37
Clipperton Island[1]	2
	7,237
French Settlements in Oceania:[2]	
Society Islands	452
Tubuai (or Austral) Islands, including Rapa and Maretiri[3]	67
Tuamotu Archipelago	330
Gambier Islands (Mangareva)	11
Marquesas Islands	491
	1,351
Total	8,588

The areas of several of the scattered archipelagos are uncertain, since many surveys are incomplete.

Most of the French islands are confined to two areas, the one comprising New Caledonia and its dependencies in the south-west Pacific, between 17° and 23° south latitude and 158° and 168° east longitude (excluding a few reefs and rocks farther east); the other, in the central Pacific, between 8° and 28° south latitude and

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[1] Clipperton Island is also claimed by Mexico.

[2] *Établissements français de l'Océanie.*

[3] Rapa and Maretiri are in *The Admiralty Pilot* and the French *Annaire* treated apart from the Tubuai or Austral Group.

131° and 155° west longitude. A few islands of the New Hebrides group lie in the north-east of the former area. The French islands outside these areas are the Hoorn and Wallis Islands, north-east of Fiji, and the isolated Clipperton Island in the eastern Pacific, 670 miles from the coast of Mexico.

The New Hebrides, and the Banks and Torres Islands, north of New Caledonia, are under the joint control of Britain and France. They are treated in *New Hebrides*, No. 147 of this series.

NEW CALEDONIA AND DEPENDENCIES

NEW CALEDONIA

(1) POSITION

New Caledonia, with the smaller islands surrounding it, lies in the south-western Pacific between about latitudes 18° and 23° south and between longitudes 163° and 168° east. It is 900 miles from Australia and nearly 1,000 miles from New Zealand. The term New Caledonia is here regarded as including the Isle of Pines, 40 miles from the southern end of the principal island, the Huon group, lying about 100 miles to the north-west, and the Chesterfield Islands, a small isolated group to the west, in about south latitude 19° and 158° 30′ east longitude. Other dependencies of New Caledonia are considered separately.

(2) SURFACE, COASTS, AND RIVERS

Surface

New Caledonia, which has a length of 250 miles and an average breadth of 30 miles, consists of a confused mass of mountain ranges, cut by many ravines. The highest peaks are Mount Panie, 5,413 ft., in the north, and Mount Humboldt, 5,361 ft., in the south. The island may be roughly divided into three fairly equal parts.

The north is very rugged, and slopes steeply to the unbroken east coast. On the west there is a fringe of plains indented in places by deep bays. The middle of the island is of lower elevation, with a gentle, rolling landscape; the west-coast plains continue, and there are many indentations on both west and east coasts. The southern end is characterized by narrow ridges and steep-sided but not precipitous valleys. The narrow western plains are practically the only level areas in this part. The west coast is strongly indented, but the east coast is fairly smooth.

In the whole island there are no real plains except that on the west coast, which varies in width from 5 to 20 miles; and only here is the soil at all fertile.

The Isle of Pines (really two islands divided by a narrow creek) is of coral formation, and rises gently to a plateau in the interior, at a mean level of 350 ft.

The Huon, Surprise, and other islands in the north, and the Chesterfield group, are small coral islands only a few feet above sea-level.

Coasts

A reef encloses practically the whole of New Caledonia. On the east coast it is a characteristic barrier reef, one to eight miles from the shore, enclosing a navigable channel along almost the entire length of the island. On the west coast the reef is much broader. There are numerous passages through it, particularly on the east; these generally occur opposite the mouths of rivers, and as a rule are as deep as the channel in the lagoon.

The coast-line is much indented on the west and less so on the east. There are several long inlets of the sea, those which are not obstructed by coral reefs forming good harbours. Landing within the shelter of the reef is generally easy. Anchorages within the barrier reef are numerous; but the best harbours, only a few of which are used, are at the northern and southern ends of the island.

Rivers

There are many short rivers, some of which on the east coast descend to the sea in a series of cataracts. Those on the west are less rapid, and several form alluvial plains at their mouths. The numerous rivers afford abundant water even in the dry season.

(3) CLIMATE

The climate is temperate. Summer, which lasts from December to February, has a mean temperature of 79° F. (26° C.), and winter, from June to August, has a mean temperature of 69° F. (20·5° C.). The absolute maximum is 86° F. (30° C.), and the absolute minimum about 62° F. (16·6° C.).

The prevailing winds are the trades, which blow strongly from the east-south-east. In winter, especially on the west coast, they are sometimes interrupted by west and south-west winds and frequent calms.

Severe cyclones occur in the summer months.

Speaking generally, the rainy season is from January to March and the dry season from September to November. The east and south coasts are the wettest, and the west coast the driest. The average annual rainfall is 73 in. (1·8 m.), and the average number of rainy days is 142. Nevertheless, drought is often serious.

(4) SANITARY CONDITIONS

The climate on the whole is healthy, and the island is free from malaria and dysentery. The natives, however, suffer largely from consumption, leprosy, framboesia (yaws), and plague, and there is a certain amount of elephantiasis.[1] Leprosy is making some headway among the white population, as isolation is not strictly enforced. On the Isle of Pines, where the natives have instituted their own leper station, the disease is nearly extinct.

(5) RACE AND LANGUAGE

The natives are Melanesians, closely related to the natives of the New Hebrides, Solomon Islands, and Loyalty Islands. The Hawaiian term *kanaka* (Fr. *canaque*) applied to them by the Europeans means 'man', and has no racial significance. On the east coast and in the Isle of Pines are many traces of Polynesian admixture. The *lingua franca* between the natives and the French is *bêche-de-mer* English, with the addition of many French words.

The New Caledonians are superior in vigour and industry to most other Pacific Islanders.

(6) POPULATION

The native population is confined chiefly to the west of the island and the river valleys. At present the natives are mainly restricted to limited reserves, and their numbers are steadily falling. In the census of 1911 the total native population of New Caledonia and its dependencies (excluding the Loyalty Islands) was 19,398, including about 600 on the Isle of Pines and a small but unspecified number on the Hoorn and Wallis Islands.

The Europeans in 1911 numbered 17,451, a total which included about 400 French troops and about 1,100 convicts in confinement. Most of the Europeans are French.

The importation of convicts ceased in 1898, and in

---

[1] Framboesia is known to the nations as *tona*.

1914 there were only 300 at the chief penitentiary on the island near Numea (Nouméa, formerly Port de France), and a few thousand ticket-of-leave men (*libérés*). The remainder of the Europeans, about 13,000, are settlers, miners, and traders, of whom over 11,000 were born in France or in New Caledonia, and there are numerous half-castes, against whom there is said to be little prejudice.

In addition to the natives there were, in 1911, 1,400 Japanese; many Tonkinese exiles and about 350 free Tonkinese; Chinese domestic servants and field-labourers; about 1,200 Javanese; Arab exiles from Algeria; and people from the New Hebrides, Loyalties, and Solomons.

The Huon Islands have a population of a few New Hebrideans; the Chesterfield Islands have no permanent inhabitants.

The French population is mainly spread along the coasts, in or near a number of small towns, most of which were founded near river mouths. The chief town, Numea, the capital of the island and its dependencies, is a commercial and distributing centre and has an extensive harbour. In 1911 the population was composed of 5,207 free whites, 1,245 convicts, 396 French troops, and 2,000 natives and Asiatics, a total of 8,848. Houailou, with a population of about 2,600, is the second town and the chief agricultural centre. La Foa (pop. 1,301), near the west coast, is the only inland town. Several other settlements have each a population of over a thousand, and depend principally on mining for their importance.

LOYALTY ISLANDS

The Loyalty Islands lie parallel to New Caledonia at a distance of about 70 miles. They extend from Walpole Island in 22° 38′ south latitude, 168° 55′ east longitude, to the Beaupré Islands in 20° 23′ south latitude, 166° 9′ east longitude. The chief islands are Mare, Tiga, Lifu or Chabrol, and Uea.[1] The islands are less adequately surveyed than any other group in the Pacific, but their total land area is estimated at about 800 square miles. All the islands are more or less elevated coral reefs.

The climate is of the same type as that of New Caledonia, but owing to the low elevation the rainfall is deficient. Water is obtained from wells, and is often brackish and generally scarce. There is not much disease among the natives, and Europeans find the climate healthy.

The natives are Melanesians, belonging to several tribes, each island having a separate dialect. They at one time had the reputation of being savage, intractable cannibals, but are now said to be a very fine people and the most civilized of all Melanesians.

The natives number about 10,000, and the white population in 1911 numbered 156. The population is probably decreasing, but there are no figures to prove this. All the islands are inhabited except Walpole Island and one or two small islets.

There are several large villages on most of the islands. Shepeneke (Chepenehé), on Sandal Bay in Lifu, is the capital, and has a population of several thousands.

HOORN AND WALLIS ISLANDS

These small islands lie west of Samoa and north-east of Fiji, and consist of two small groups about 120 miles apart.

The Hoorn Islands, comprising Futuna and Alofa (about a mile apart), lie some 150 miles north-east of

---

[1] In French Uvea or Ouvéa. The same name is given by the natives to Wallis Island.

Vanua Levu (Fiji). Futuna, 8 miles long by 5 miles broad, rises to a height of 2,500 ft. The reefs off the island are not continuous. Alofa is 6 miles long by 3 miles broad, and rises to a height of 1,200 ft.

Wallis Island, or Uea (*Fr.* Uvea), is 300 miles west of Samoa, and is an elevated volcanic plateau rising to a height of about 470 ft. A barrier reef encloses it and a number of smaller islands.

The climate is healthy and the water-supply fair. The prevailing winds are the trades blowing between east-south-east and north-north-east; but in the early part of the year they are often interrupted by north-westerly and northerly winds accompanied by rain and squalls. The islands lie within the hurricane area of the western Pacific.

The natives are Polynesians, and closely resemble the Tahitians, being idle but pleasant in manner. The only Europeans are a few traders, the French Resident, and the Roman Catholic missionaries, who dominate these islands. In 1913 there were several Chinese planters.

The population is included with that of New Caledonia. The chief village is Matautu (Wallis Island).

CLIPPERTON ISLAND

Clipperton Island lies remote from all other Pacific Islands in 10° 17′ north latitude and 109° 13′ west longitude, and 670 miles south-west of the Mexican port of Acapulco. It is a low atoll 2 to 3 miles in diameter, enclosing a single rock 82 feet high.

The climate is warm and equable. The rainfall is said to be plentiful, and provides the only water-supply. From December to May is the dry season.

The island is now uninhabited, but there are a few huts and store-sheds, and an abandoned lighthouse.

FRENCH SETTLEMENTS IN OCEANIA

(1) Race and Language

The natives are all Polynesians, a race which is better developed both physically and mentally than the Melanesian race of the south-western Pacific. The Polynesians are peaceful in habits and generally, but not always, friendly towards Europeans.

The Polynesian language has many dialects, differing considerably from one another. The Tahitian dialect is probably more widespread than the others, and is understood in the Tubuai Islands and Rapa. A form of *bêche-de-mer* English, including a certain number of French words, is used in some places as a *lingua franca.* The French language is not widely spoken.

(2) Population

Natives.—The total population of the French Settlements in 1911 was 31,477, compared with 30,974 in 1907. These figures conceal the serious decrease among the native population, which is, however, not so great as has sometimes been represented. The apparent increase in 1911 over 1907 is mainly accounted for by the introduction of Japanese labourers to work the phosphate deposits in Makatea, and by an influx of Chinese in many islands.

Europeans and Asiatics.—The number of Europeans and coloured immigrants (included in the above total) in 1911 was 2,656 French, 103 Germans, 237 Americans, 484 British, 975 Chinese, 346 Japanese, 280 natives of other Pacific Islands, 53 Portuguese; and a few individuals of Austrian, Belgian, Chilean, Dutch, Spanish, Italian, Scandinavian, and Swiss nationality, with some Annamites. The Chinese population seems to have increased considerably since the census of 1911.

SOCIETY ISLANDS

(1) POSITION

The Society Islands form a small but important group, the most westerly of the French Settlements, extending from 15° 48′ to 17° 53′ south latitude and from 148° 5′ to 154° 43′ west longitude. The islands number 14, divisible into two groups, the Windward (eastern) and the Leeward (western). The principal islands in the Windward group are Tahiti, the largest island in the Settlements, which has an area of 402 square miles, Moorea (Aimeo), Mehetia (Maitea), Tubuai Manu, and Tetiaroa. The Leeward group includes Raiatea, Tahaa, Huahine, Bora Bora, Motu Iti (Tubai), Maurua (Maupiti), Mopihaa (erroneously Mopelia), Fenua Ura or Scilly, and Bellingshausen or Motu One.

(2) SURFACE AND COASTS

Surface

Most of the islands rise to a height of several thousand feet. The highest peak is Orohena (7,321 ft.), on Tahiti. A few of the smaller islands, including Tetiaroa, Motu Iti, Mopihaa, Fenua Ura, and Bellingshausen, are low-lying coral islands, for the most part encircling lagoons. Around the coasts are narrow, low-lying plains, from which many valleys open into the interior. Inland routes are seldom practicable, owing to steep gradients, but on Tahiti the low isthmus of Taravao, 1¼ miles across, which cuts the island into two unequal parts, affords an easy route from sea to sea.

The alluvial soil of the coastal plains and valleys is extraordinarily fertile, while the coral islands and the reef-islets that fringe the larger islands are also cultivated to some extent. There are no minerals.

All the islands which rise to any height have a good water-supply from many streams; but the small coral islands have to depend on rain-water or wells.

Coasts

All the islands, except Mehetia, are fringed with coral reefs, which are generally wide and continuous, except for a few passages affording access to the lagoon within. Landing on the seaward side of the reefs is seldom possible on account of the heavy surf, but it is generally easy within the lagoon.

(3) CLIMATE

The climate is very equable throughout the year, with a mean temperature of about 79° F. (26° C.). In July and August, the coolest months, the lowest recorded temperature at Papeete is 60° F. (15·5° C.), and in February and March, the warmest months, the highest recorded temperature is 94° F. (35° C.).

The south-east trade-wind blows from April to December, and from January to March west winds often occur. The total rainfall is about 60 to 70 in. (1·5 to 1·75 m.) at Papeete, and four-fifths of this fall between November or December and March.

(4) SANITARY CONDITIONS

The climate is healthy, and during the dry season very pleasant. The natives, however, suffer much from tuberculosis and elephantiasis. Leprosy is not common.

(5) POPULATION

All the islands except a few atolls are inhabited, but the population is not dense. In 1911 Tahiti had a population of 11,378, of whom 7,491 were natives, the remainder being chiefly French, with a few British and Americans, and about 400 Chinese. Moorea in 1911 had a population of 1,616, of whom 1,571 were natives. The population of the Leeward group was 6,689, of whom about 300 were Europeans and 810 Chinese. In this group the native population is increasing—a unique phenomenon in the Settlements.

The population is scattered round the coasts, and there are numerous villages. Papeete, the capital of the Settlements, had in 1911 a population of 4,099, of whom 1,102 were natives, 2,135 French, 269 British, 117 Americans, 49 Germans, and 392 Chinese. Uturoa, on the island of Raiatea, is the largest settlement in, and administrative centre of, the Leeward group.

TUBUAI ISLANDS

The Tubuai or Austral Islands lie south of the Society Islands. They consist of seven scattered islands or groups of islets between 21° 45′ and 28° south latitude and 143° 30′ and 155° west longitude. The principal islands from west to east are Maria or Hull, Rimatara, Rurutu, Tubuai, Raivavae, and, 300 miles to the south-east, Rapa (Rapa-Iti) and Maretiri or Bass Islands. The total land area is said to be 67 square miles, of which Rapa occupies 16 square miles, but some authorities give a total area of nearly double this figure.

All the islands, except Rimatara and the low Maria Islands, are rugged and mountainous, rising to a height of 1,300 to 1,400 ft., with the exception of Rapa, which reaches an altitude of 2,077 ft. Rapa has a long inlet from the east which opens into the heart of the island. There is little low ground on any of the large islands, except a narrow strip along the coast.

The soil on the volcanic islands is fertile, and the water-supply is sufficient without being abundant.

All the large islands except Rapa are surrounded with barrier reefs. Landing is always possible within the lagoons, but in very few cases are the channels in the reefs suitable for any but small craft.

The climate is mild and temperate, and the seasons are well marked. On Rapa the temperature seldom rises above 76° F. (25° C.) in summer or falls below 58° F. (14·5° C.) in winter. The islands lie at about the southern limit of the south-east trades, which blow from November to March among the northern islands. In winter, from May to September, west winds with much rain prevail, especially at Rapa. The climate is healthy both for Europeans and natives.

The total native population of the whole group in 1911 was about 2,500, of whom 879 were on Rurutu, 542 on Tubuai, 429 on Raivavae, 413 on Rimatara, and 182 on Rapa. The European population in 1911 was 67, including 9 French, 13 British, and 33 Portuguese.

TUAMOTU ARCHIPELAGO

The Tuamotu or Low Archipelago, known formerly as the Paumotu Archipelago, includes about 80 small islands between latitudes 14° and 25° south and between longitudes 149° and 125° west. The principal islands, Fakarava, Anaa, Kaukura, Rahiroa (Rangiroa), and Makatea, are in the north-west of the archipelago, not far from the Society Islands.

All the islands are of coral formation, and, with two or three exceptions, are low-lying atolls surrounding lagoons varying in width from a few hundred yards to 42 miles (e. g. Rahiroa). Makatea has no barrier reef, but is an island of elevated coral and phosphatic rock rising to a plateau 230 ft. above sea-level, with a slight central depression.

The soil of the islands is seldom deep, and is as a rule very limited in extent. The water-supply is generally poor; there are no streams, and wells are scarce, with an uncertain flow.

The climate is hot and dry, but the mean temperature is lower than in the Society Islands. The south-east trades prevail, but they are unsteady. The conditions are healthy to both natives and Europeans.

The population of the islands in the Tuamotu administration in 1911 was 4,581, including 60 French, 27 British, and 8 Germans, and that of the Tuamotus in the Gambier administration about 900 (see below). Makatea has a population of 866, of whom 345 were Japanese labourers on the phosphate works, 51 French, and 26 Chinese. There are one or two small villages on each of the larger atolls, of which Rotoava on Fakarava is the administrative capital of the Tuamotu Archipelago.

GAMBIER ISLANDS (OR MANGAREVA)

The Gambier Islands lie at the south-eastern end of the Tuamotu Archipelago. The group consists of four principal and several smaller islands enclosed in a barrier reef nearly 40 miles in circumference, and a small isolated atoll called Temoe or Crescent Island. Several islands of the Tuamotu Archipelago are sometimes improperly included in the Gambier group.

The principal islands, unlike those of the Tuamotu Archipelago, are lofty. Mangareva, the largest, rises to a height of 1,325 ft., and there is little low-lying ground. The numerous small coral islands are low-lying but of small value. The soil of the volcanic islands is very fertile. Spring water is scanty and difficult of access even on the larger islands.

The climate may be compared with that of the south of France. There is a hot season from September to March, when the temperature varies from 75° to 80° F. (23·5° to 26·5° C.), and a cool season from April to August, with a temperature ranging from 72° to 76° F. (22·2° to 25° C.). The south-east trade-winds begin about the end of March ; from September they decrease in strength, and by December die away altogether. Rain falls in all months ; but the largest amount in the last four months of the year. In one year the total rainfall recorded at Rikitea was 107 in. (2·7 m.).

The population of the Gambier administration in 1911 was 1,512, mostly on Mangareva, including 15 French and a very few other white men. This total includes the population of 23 islands of the Tuamotu Archipelago which are within the Gambier administration.

MARQUESAS ISLANDS

The Marquesas Islands lie north of the Tuamotu Archipelago, between latitudes 7° 50′ and 10° 35′ south and longitudes 138° 25′ and 140° 50′ west. They comprise eleven islands arranged in two groups. The chief islands in the south-west group are Hivaoa or Dominica, Tahuata or Santa Christina, and Fatuhiva or Magdalena, and in the north-west group Nukahiva or Marchand, Uahuka or Washington, and Uapu or Adams. The total land area of the Marquesas is 491 square miles, of which Nukahiva and Hivaoa, the two largest islands, occupy respectively 186 and 154 square miles.

With the exception of the small, low coral islands in the extreme north, the Marquesas are lofty volcanic islands rising to several thousand feet. In general, from the central mountain narrow ridges separated by wide valleys run down to the sea. The steep mountain slopes make travel very arduous, and practically all communication is by sea. There are numerous streams affording an excellent water-supply, and the soil on all the large islands is very fertile.

The climate is warm and humid, the mean temperature ranging a few degrees above or below 82° F. (27·7° C.) throughout the year. From April to October the trade-wind between east and south-south-east prevails; from October to April the wind is generally between east and north-north-east. May, June, and July are the wettest months, rainfall then sometimes being extraordinarily heavy. The remaining months are much drier. The climate is healthy for both Europeans and natives, although the latter suffer much from leprosy, tuberculosis and other introduced diseases.

The native population, which is steadily decreasing, numbered 3,116 in 1911. During the last 40 years the decrease has been about 3,000.[1] The European population in 1911 included 108 French, 21 Americans, and 17 Germans, but no British. Hivaoa is the most populous island; but all the islands except the barren rocks are inhabited. The only settlements of importance are Hakapehi in Nukahiva, the former administrative centre, with a population of about 350, and several villages on Hivaoa, one of which, Atuona, is now the capital of the islands.

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[1] The figures above quoted for the population of the French Settlements must be considerably modified by the mortality caused by influenza in 1918–19, when the deaths among Polynesians alone in the Society Islands and Makatea amounted to 3,000—or 22 per cent. of all the natives of French Oceania, apart from New Caledonia and its dependencies. (*L'Océanie française*, Jan.–Avril, 1919, p. 24.)

II & III. POLITICAL HISTORY AND SOCIAL & POLITICAL CONDITIONS

Chronological Summary

1595	Spanish discovery of the Marquesas.
1616	Dutch discovery of the Hoorn Islands.
1767	British discovery of the Society (Tahiti) and Low Islands.
1768	British discovery of Wallis Island.
1774	British discovery of New Caledonia and the Isle of Pines.
1791	French discovery of the Huon Islands.
1797	London missionaries arrive in Tahiti.
1800–3	British discovery of the Loyalty Islands.
1827	French expedition surveys the Loyalty Islands.
1842	French Protectorate of Society Islands (Tahiti), the Windward group, and the Marquesas.
1847	The Leeward group of the Society Islands declared independent by an agreement between the British and French Governments.
1853	French annexation of New Caledonia and neighbouring islands.
1864	French convicts first sent to New Caledonia. Loyalty Islands annexed.
1880	Tahiti proclaimed a French colony.
1887	Agreement about the Leeward group of islands cancelled. French protection extended over the whole of the Society Islands.
1898	New Caledonia ceases to be a penal station.

NEW CALEDONIA AND DEPENDENCIES

II. Political History

(1) *Discovery and Annexation*

New Caledonia was discovered in 1774 by Captain Cook. In 1792 it was visited by a French expedition under d'Entrecasteaux. The first recorded visit to the Loyalty Islands was that of Captain Butler.

either in 1800 in H.M.S. *Walpole*, or in 1803 in H.M.S. *Britannia*—it is not certain which. In 1827 a more systematic survey of the Loyalty Islands (which had escaped the notice of Cook) was made by Dumont d'Urville. Soon afterwards Roman Catholic missions were set on foot, which were maintained, though without much success, till the annexation of New Caledonia by France in 1853. It is curious to note that Dr. Lang of Sydney had proposed to the Frankfort Parliament in 1848 that a German colony should be started on this island. It would seem that the French in 1853 narrowly anticipated a British occupation.[1] According to the *Moniteur* of February 14, 1854, the motive for annexation was ' to assure to France in the Pacific the position demanded by its naval interests, military and commercial, and to afford the opportunity of putting in force the Government's views with regard to the treatment of criminals '. The Loyalty Islands were not formally annexed till 1864, the annexation being met with indignant protests by the British missionaries stationed there.

In addition to the Loyalty Islands, the following are dependencies of New Caledonia: the Isle of Pines, annexed at the same time as the main island; Wallis Island; the Huon Islands; the Chesterfield Islands; and the Hoorn Islands.

(2) *Economic Progress*

Convicts were first sent to New Caledonia in 1864. There seems to be a general agreement that its progress was retarded by the system of transportation which at first prevailed. Of the three classes dealt with—political offenders, recidivists, and ordinary criminals—the first, with all their interests centred on France, showed themselves useless for the development of the country; the second had advanced too far on the road to ruin for redemption to be possible; while the unwise treatment of the last prevented their achieving those preparatory works which might have hastened the progress of an infant colony.[1] The system was discontinued in 1898; and from this date the penal element in the population began to diminish.

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[1] *L'Archipel de la Nouvelle-Calédonie*, par A. Bernard, p. 326.

No doubt the evil associations connected with the transportation system and the unfortunate results of its working have reacted unfavourably upon the development of New Caledonia. On the other hand, it must be remembered that the French are not an emigrating race, and that New Caledonia holds out few inducements to the ordinary emigrant. The native population, which is of a low or primitive type, has steadily decreased. But there is also (according to Mr. Compton) an immigrant population of a higher type.

III. SOCIAL AND POLITICAL CONDITIONS

(1) *Religious*

Most of the natives are Christian, with the exception of those of New Caledonia, who remain mostly pagan in spite of the efforts of the missionaries. Protestants preponderate in Tahiti and Roman Catholics elsewhere.

(2) *Political*

The administration of New Caledonia and its dependencies is in the hands of a governor, assisted by a Privy Council; there is an elected General Council which deals with local expenditure; and at the capital

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[1] See on this point ' European Influence in the Pacific, 1513–1914 ', by Sir Everard im Thurn, K.C.M.G. (*Geographical Journal*, April 1915, p. 317), and ' New Caledonia and the Isle of Pines ', by R. H. Compton (*Geographical Journal*, February 1917, p. 96).

(Numea), a town of 1,000 inhabitants, there is a Municipal Council. There are similar Councils or Municipal Commissions at some other centres.

(3) *Educational*

Primary education is given in public and private schools, the latter aided from municipal funds.

General Observations

Schemes of assisted emigration have not, in the past, been attended with success; and it would seem that before the late war New Caledonia was, at best, in a stationary position. Nevertheless, there is a strong belief in its future among Frenchmen interested in colonial questions. The last British consular report upon the colony, for the year 1914, speaks of a marked improvement in its economic conditions, and anticipates that, 'when the present phase has passed, the prosperity existing before the opening of hostilities may reassert itself, for it rested apparently on a solid and lasting basis'.[1]

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[1] No. 5533, Annual Series, *Diplomatic and Consular Reports*, December 1915, p. 5. This report has a map of the colony. But Mr. Compton writes (*Geographical Journal*, February 1917, p. 96): 'The period of maximum number of convicts was also the period of the maximum prosperity of the French population. . . . The result of the stoppage of transportation has been to create commercial depression; and the prosperity of the colony has been on the down-grade since 1894.'

FRENCH SETTLEMENTS IN OCEANIA

II. POLITICAL HISTORY

(1) *Extent*

The French Settlements in Oceania are the oldest French possessions in the Pacific. They consist of the Windward group of the Society Islands, of which the chief island is Tahiti, in which is the small town of Papeete, the centre of government for French Oceania; the Leeward group of the Society Islands; the Marquesas Islands; the Tuamotu or Low Islands and the Gambier group; and the Tubuai or Austral Islands with the island of Rapa-Iti.

(2) *Early History*

The first discovery was that of one of the Marquesas, visited by the Spaniard Mendaña in 1595, and rediscovered by Captain Cook in 1774. Tahiti was first discovered and visited in June–July 1767, by an Englishman, Captain Wallis, in H.M.S. *Dolphin.* It was named by him King George the Third's Island. In the next year, 1768, it was visited by the Frenchman Bougainville, and in 1769 by Cook. A Spanish vessel appeared on the scene in 1772;[1] and among slightly later visitors should be mentioned Captain Bligh, who was at Tahiti in 1788, and whose ship, the *Bounty*, after the mutiny, was brought back by the mutineers to Tahiti in 1789, and went on thence to Pitcairn Island.

In 1797 the first English missionaries to the Pacific landed at Tahiti; they had been sent out by the (London) Missionary Society. Tahiti thus became the earliest centre of Protestant mission work in the Pacific, and acquired a strong Protestant and British connexion. In 1825 the Queen of Tahiti asked for permission to use the British flag, and expressed the hope 'that you will never abandon us, but regard us with kindness for ever'.[1] Canning's reply, in 1827, was that the customs of Europe forbade compliance with the request to be allowed to use the British flag, but that the King

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[1] In regard to this and subsequent Spanish visits reference should be made to *The Quest and Occupation of Tahiti by Emissaries of Spain during the Years 1772–6*, edited for the Hakluyt Society by B. G. Corney. 3 vols. 1913–19.

> 'will be happy to afford to yourself and to your dominions all such protection as His Majesty can grant to a friendly Power at so remote a distance from his own Kingdoms'.

(3) *French Intervention*

In November 1836 the British consul, Pritchard, reported that 'at present there are several Frenchmen who are determined to land and reside on this island [Tahiti] as Roman Catholic missionaries'; and he asked for guidance, inasmuch as a Tahitian law provided that no passengers should be landed from a ship without the special permission of the Government. The Queen of Tahiti herself wrote at the same time:

> 'The Roman Catholic missionaries are obstinately bent on coming to reside at Tahiti, saying that they are sanctioned in the step by the British Government. . . . It is by no means agreeable to us to receive these Roman Catholic missionaries.'

Palmerston's answer, sent in 1837, was in effect to decline British intervention. At the end of August 1838 the French frigate *la Vénus* arrived at Tahiti and Captain Dupetit-Thouars demanded reparation for the treatment of the French missionaries, with the result that, on September 4, 1838, a Convention was signed conceding, in matters of trade and residence, most-favoured-nation treatment to Frenchmen of all denominations.

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[1] See Parliamentary Paper, *Correspondence relating to the Proceedings of the French at Tahiti, 1825–43*; and *Annual Register* for 1842, pp. 337–341.

This was followed in November 1838 by an appeal for British protection, a Tahitian law being passed at the same time to bid the Tahitians 'stand united under that Gospel which the missionaries from Britain have propagated ever since the year 1797'. Palmerston, however, in September 1839, declined to enter into any specific engagement involving defensive obligations, though he coupled his refusal with an assurance of readiness to attend to any representations made and to give the protection of good offices. The sequel was that in September 1842 a French frigate again appeared on the scene; the French admiral in the Pacific again complained of maltreatment of French subjects; and the Queen was forced, on September 9, formally to accept a French Protectorate.

In 1842 the Marquesas Islands also came under French control, prior to the establishment of the French Protectorate of Tahiti; and the importance which the French Government attached to their new acquisitions is shown in the statement of the Minister of Marine in the French Chamber, published in the Parliamentary Paper of 1843 already quoted; it is also given in the *Annual Register* for 1842.

(4) *The Pritchard Case*

The British consul at Tahiti, for some years prior to French intervention, had been George Pritchard, who had originally come out as a missionary and had acquired the full confidence of Queen Pomaré. He was still consul when the events referred to above took place, but was in England in 1842, placing before the British Government the case of the Tahitian Queen and her subjects. He landed again at Tahiti on February 25, 1843. According to his own account, he found the Queen 'driven from her proper residence by the continual threats made by the French to fire upon her', and had her brought home in a British ship-of-war. The French charged him with endeavouring by all possible means to undermine their authority; and eventually, a native rising having taken place in March 1844, he was seized and imprisoned, being subsequently released on condition that he left the Society Islands for good.

His attitude towards the French had not been in keeping with the policy of Sir Robert Peel's Government, which had decided on not intervening beyond friendly representations to the French Government, so long as the Protestant missionaries were granted equal treatment; and in September 1843 a dispatch had been written to Pritchard (which would not have reached him till months later) plainly disapproving his course of action and strictly enjoining abstention from any opposition to the French. He was described in the House of Lords by the Foreign Minister, Lord Aberdeen, in the debate on the Queen's Speech for 1845, as having exceeded his duty without instructions and without authority. However, his treatment by the French made the situation between Great Britain and France for the moment very serious, a settlement being eventually found in an apology from the French Government and the payment of an indemnity to Pritchard himself.[1]

(5) *The Leeward Group*

French relations with the Tahitians remaining unsatisfactory, a Declaration was signed June 19, 1847, by the British and French Governments, acknowledging the independence of the Leeward Group of the Society Islands, the object being to provide a refuge for Tahitians wishing to emigrate beyond the reach of French control.[1] This engagement was eventually cancelled by a Convention of November 16, 1887, which also related to the New Hebrides, the British Government having already, since 1880, consented to a provisional French Protectorate over one of these islands—the island of Raiatea.[2] In 1880 Tahiti had been proclaimed a French colony, on the abdication of the son of the former Queen Pomaré.[3]

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[1] See three Parliamentary Papers of 1843, 1844, and 1845; *Annual Register* for 1844, pp. 260–1; for 1845, pp. 6–9, &c.; *Dictionary of National Biography, s.v.* G. Pritchard; *Sir R. Peel,* edited by C. S. Parker, vol. iii, p. 394.

The other islands have little or no history, the most interesting incident, perhaps, being the attempt of the captain of an American privateer in the war of 1812—Captain David Porter in the *Essex*—to found an American Station in the Marquesas Islands.[4]

III. Social and Political Conditions

The French Establishments in Oceania are administered by a Governor, with an Administrative Council consisting of three other high officials, the Mayor of Papeete, and the Presidents of the Chambers of Commerce and Agriculture.

Commerce long remained stationary in Tahiti; but from 1908 onwards it increased rapidly, mainly owing to the rise in the price of vanilla and copra. The greater portion of the exports go to the United States, and Great Britain takes rather more than France. The United States and Australasia furnish the bulk of the imports.

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[1] See Parliamentary Paper of 1847, 'Papers relating to Tahiti and to the Leeward or Society Islands in the Pacific'. The name of the whole group is now the Society Islands, these being divided into two sub-groups, the Windward and the Leeward.

[2] See Parliamentary Paper, France, No. 1 (1888). Cd. 5256. February 1888.

[3] The authority for this is the *Encyclopaedia Britannica.*

[4] 'European Influence in the Pacific, 1513–1914.' An Address by Sir Everard im Thurn, K.C.M.G., C.B. *Geographical Journal* for April, 1915.

There are six primary schools in the islands, and the same number of Mission schools.

IV. ECONOMIC CONDITIONS

Introductory Note

The French Pacific Islands lie on important trade routes. The routes from Sydney to Vancouver and from Sydney to San Francisco both pass, as a rule, by the southern end of New Caledonia. The French Settlements are almost midway between Australia and the Panama Canal, and afford good ports of call and coaling stations in the south-eastern Pacific. The route from Panama to Sydney passes within a few miles of the harbours of Rapa and Mangareva in the Gambier Islands. A deviation to Papeete in Tahiti, one of the Society Islands, would lengthen the route by about 120 miles, but would yield compensating advantages. Papeete, which is the capital of the Settlements, is situated on the largest and most populous island, and has commercial interests of its own, which neither Rapa nor Mangareva could have, except to a trifling extent. It is also a better port than Rapa, which could be improved only at considerable cost, and even then would not be so satisfactory. Moreover, it would be possible to bring coal to Papeete more cheaply than to Rapa. On the other hand, this route would entail the risk of navigation among the low islands of the Tuamotu group, unless a further deviation were made north-west of them, while better weather would be experienced between Rapa and Sydney. East and west of the Settlements lie British islands which offer no facilities for coaling stations. Clipperton Island, an outlying French possession, lies about 200 miles north of the route between Panama and Singapore, and almost on the direct route between Panama and Honolulu, but there is no access to its lagoon.

NEW CALEDONIA AND DEPENDENCIES

NEW CALEDONIA

(A) MEANS OF COMMUNICATION

(1) *Roads*

There are several excellent roads, suitable for motor traffic, and also some of an inferior description. There is a motor service between Numea and Bourail (125 miles). Northwards from Bourail on the west coast, and along the whole of the east coast, the usual mode of transport is on horseback.

(2) *Rivers*

The rivers are short and unimportant. The Diahot is navigable by boats for 20 miles, but no others for more than 4 or 5 miles.

(3) *Railways*

There is a narrow-gauge, single-track railway between Numea and Paita (about 20 miles). An extension to Bourail is contemplated, which would make a total length of 125 miles. The railway was projected in 1895, but the first loan raised in 1901 was only sufficient to allow of its construction as far as Dumbea (about 10½ miles). This section has been open since 1905, and, in spite of the fact that it cost more than was necessary (about £14,000 per mile) and hardly reached the richer regions of the island, it has nearly covered the expense of construction. The utility of this railway has often been questioned, owing to the small size of the island, and the possibilities of coastal communication. The latter, however, is often rendered impossible by rough weather; moreover, the mining and agricultural centres are sometimes as much as 20 kilometres inland. In some cases small lines were constructed by private enterprise to bring the produce to the coast, but a line running parallel to the coast was necessary in order to bring to Numea the produce of the west, and such a line could be constructed only by the colony.

(4) *Telegraph and Telephone*

There are several telegraph and telephone stations on the island.

(5) *Ports*

The island has an excellent harbour at Numea, with naval and commercial coaling stations. It is easy of access, perfectly sheltered, and available for the largest ships. Leading lights mark the fairway. There are over 2,000 ft. of quayage, with 25 ft. of water alongside. There are coal-sheds belonging to the Government on Nou Island, capable of storing 20,000 tons, but they are seldom full. There is a wharf at this coaling station. A stock of about 2,000 tons of coal is usually kept by private firms.

There are several other good harbours. In Prony Bay, at the south end of the island, there is good holding ground, but the water is too deep for convenient anchorage except in Sebart Cove. Tanle Bay, on the north-west, contains the best sheltered harbour on the whole of the west coast. Ohope Bay, immediately to the north of Tanle Bay, and Harcourt Bay at the north end of the island, are also good. On the east coast, Kanala Bay is probably the safest and most commodious anchorage. Several of the harbours besides Numea have leading lights and loading facilities; others which are much frequented are little more than open roadsteads, for example, Thio, Paagoumene, and Teoradie.

The Isle of Pines has a restricted anchorage for small vessels in Kuto Bay.

(6) *Shipping*

A steam vessel, under the French flag, runs monthly from Numea to the Loyalty Islands and the New Hebrides. There is also a monthly service to the Isle of Pines, and a fortnightly service along the coast. Most of these services are provided by the Union Commerciale de Navigation Calédonienne. The mails are carried by the vessels of the Messageries Maritimes, which are subsidized at the rate of £15,000 a year by the French Government; and by an Australian company when a freight from Sydney is procurable. The French mail steamers are independent of freight, and arrive regularly. As in the case of other Pacific islands, the shipping facilities were considerably developed in the years just before the outbreak of war. Previously they had been quite insufficient.

By a presidential decree of October 1913, the coastal trade of New Caledonia is reserved to vessels under the French flag. Foreign vessels, however, may be authorized to proceed to any place on the coast other than Numea, but must pay a due of 1 fr. 50 c. per ton of the registered tonnage. Vessels which confine themselves to embarking products of New Caledonia pay at the rate of 1 fr. 50 c. per ton of merchandise loaded. This regulation refers only to foreign vessels coming from abroad; locally-owned craft engaged in the coasting or inland trade must be under the French flag. The rule holds even in the case of pleasure boats, steam launches, &c.

A return of the shipping entered and cleared at the New Caledonian ports during 1913 will be found in Table 1 of the Appendix (p. 60).

(7) *Cable and Wireless Communication*

There is a wireless station at Numea; and a submarine cable connects Gomen Bay, New Caledonia, with Harvey Bay, Queensland.

(B) INDUSTRY

(1) Labour

The main difficulty in the development of New Caledonia and other French settlements in the Pacific is the scarcity of labour. The native population appears to be steadily decreasing. Moreover, the natives are lazy and capricious, and do not, as a general rule, make good workmen or cultivators. New Caledonians, however, are said to be superior to most Pacific Islanders in this respect.

Attempts have been made to introduce foreign labour, and in 1911 there were Japanese in the island working as miners, *trochus* collectors (see p. 34), servants, and agricultural labourers; also Chinese, acting as domestic servants and field labourers. Latterly a good many Chinese of a not very desirable kind have emigrated to the island and taken up trade as small dealers and shopkeepers. The efforts of France to induce emigration to New Caledonia have met with only partial success.

(2) Agriculture

(*a*) *Products of Commercial Value*

Although there seems to be no doubt that all the ordinary tropical products could be successfully grown in New Caledonia, the colony is so small and the labour difficulty so serious that it is unlikely that there will ever be a considerable export trade in agricultural produce, with the possible exception of copra.

Coffee plantations are increasing, especially in the north, but the crop is liable to damage by occasional cyclones and by the pest *Hemileia vastatrix*, which has latterly caused a considerable decrease in the export. Prospects are, however, more hopeful, as varieties of coffee have been introduced which are said to be immune from this plague.

Copra.—The export of copra is set down in the returns for 1913 as 3,165 tons, value £76,092, but from this total must be deducted 240 tons from the New Hebrides. The demand for copra, especially for alimentary purposes, is steadily increasing. The market price was well maintained before the war, and is now likely to rise. It is a matter for regret that the development of this profitable industry, like others in the island, is considerably hampered by the difficulty experienced in obtaining labour.

Cotton-growing was established in the island in 1908, and rapidly increased in importance. As there are no frosts, the plant thrives and is productive for many years. The cotton is of excellent quality and yields abundantly, the price fetched being 50 per cent. higher than good moderate American. In 1913 the value of the cotton exported was £15,000, but the fall in price which took place in August 1914 put an end for the time being to the export, the planters preferring to hold their stocks. One-third of the export came from the New Hebrides.

Other Vegetable Products.—Maize produces two crops a year. There is little ground suitable for rice, and its cultivation is diminishing. Tobacco has been tried, but has not given satisfactory results. The rubber industry almost disappeared from the island at one time, but prospects have since somewhat improved. Successful experiments have been made with vanilla and pine-apples. The natives also cultivate sweet-potatoes, yams, manioc, bananas, plantains, and taro.

Cattle.—It is estimated that there are over 100,000 cattle and about 500,000 sheep in the island. Meat-preserving establishments have been started at Numea and Waco, and preserved meat to the value of £24,000 was exported in 1913.

Guano is found on the Huon Islands and the Chesterfield Islands. On the latter there are said to be 135,000 tons.

(*b*) *Cultivation and Irrigation*

The natives cultivate carefully, and have considerable skill in irrigation, but the decrease in population has resulted in the abandonment of much arable land. The colonists, on the other hand, employ no methods of irrigation or manuring, and in consequence the soil is soon exhausted and gives poor results. Torrential rains and devastating floods with long periods of drought also make agriculture difficult. It is estimated that the total cultivable area is about 1,500 square miles. An equal amount is suitable only for pasturage, while about 750 square miles are covered with forests.

(*c*) *Forestry*

The coasts are low and bordered by thick tropical forests, with mangrove swamps in places. The forests also extend inland along the river valleys, but away from the rivers there is grass-land, which becomes parched in summer. The more exposed hill-sides are covered with open savanna, with many low-growing bushes. At a high elevation among the mountains there are dense tropical forests, containing palm-trees, tree-ferns, hard woods, and coniferous trees. Among the forest trees of value are the *kauri*, which provides building timber, rosewood and sandalwood, both of which have been nearly exhausted, ironwood, ebony, and other hard timbers. Bread-fruit, citron, banana, and other fruit-trees, both native and introduced, do well.

In its timber New Caledonia has a natural resource of which scarcely sufficient use has been made. It possesses enough wood to supply its own needs for building, cabinet-making, &c., and it might even be able to establish a lucrative export trade. Before the war nearly all the timber used on the island was brought from Australia or the United States. In 1914, however, the Société Forestière had begun the exploitation of its forest concessions in the Plaine des Lacs. These forests are especially rich in trees yielding essences.

The forest resources of the dependent islands are negligible.

(*d*) *Land Tenure*

The Government appear to have no settled policy as regards land tenure, and it is probable that the acquisition of a clear title to land is attended by the same difficulties as those which occur in the case of Tahiti (see below, p. 46). The policy, however, of confining the natives to reservations is gaining ground, though it is very unpopular among them.

(3) FISHERIES

Fish abound in the lagoon. There are no pearl fisheries; but the *trochus*, a conical nacreous shell, is found. Excessive collecting has exhausted the supply except in water too deep for diving, but the industry might be restored to its former importance by a careful restocking of the beds and supervision of the fisheries.

Bêche-de-mer is collected on the reefs. On the Huon and Chesterfield Islands there are many turtles.

(4) MINERALS

The most important ores in the island are those of *nickel*, *chromium*, and *cobalt*. There is also a good deal of *iron* ore, but for want of good coal it has not been exploited, and much of it is low-grade.

The total of nickel ore cannot be estimated, as much of the country is inadequately explored, but new deposits are continually being found and worked as others become exhausted, and there is as yet no shortage. A large proportion of the poorer nickel ore is treated locally in furnaces which have recently been established on the island. Only the richer grades of ore are now sent abroad. The amount of metal in the so-called *matte*[1] is normally about 50 per cent.

The export of nickel, though an important item in the resources of the island, represents but a small proportion of the world's output, the greater part of which is produced in Canada. The total yield from New Caledonia in 1913 was 10,933 tons of nickel, while in the same year the Canadian *matte* contained 24,838 tons of nickel. The value of New Caledonian nickel is greatly influenced by the market price of the Canadian production.

Chromium occurs as chromite, and a large proportion of the world's production comes from New Caledonia, where the mineral was first discovered in 1894. The richest mine now being worked is the Tiebaghi, which yields per month about 4,000 tons of ore, carrying up to 67 per cent. of chromium. The value of the chromium exported in 1913 was £73,000. Figures showing the countries of destination of the exports of chromium and nickel will be found in Table 3 of the Appendix.

Coal has been found in the island, but not as yet in paying quantities or of good quality. There is considerable difference of opinion as to the prospects of finding better deposits. It would be to the advantage of the island if coal could be mined, as at present furnaces have to depend entirely on imported coal, which is naturally expensive.

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[1] A product obtained in smelting sulphide ores of certain metals, e.g. copper, lead, and nickel. It is crude metal combined with more or less sulphur and requires to be further purified.

Cobalt is found, and used to be mined, but, owing to the discovery of argentiferous cobalt ore in Canada, the New Caledonian industry has been killed and the mines closed.

Copper occurs principally in the Diahot valley in the north; *gold* along the north-east coast; *antimony* at Makety near Kanala, and *manganese* near Gomen and Bourail. All have been mined, but the quantities obtained have been too small to be profitable.

(5) MANUFACTURES

The principal industry of the colony is in connexion with the smelting of nickel and other ores. The Société des Hauts Fourneaux de Nouméa, which commenced operations in 1910, possesses eight furnaces capable of producing 300 tons per month. The *mattes* obtained from the ore treated contain from 40 to 46 per cent. of nickel. The Société Le Nickel has built at Thio a furnace of a capacity of 100 tons, and in 1913 a second and larger one was in course of construction. The Mines du Nord also have extensive smelting works at Thio and Pam.

The Société Le Nickel has factories at Havre and in Scotland. The mineral produced by the Société des Hauts Fourneaux de Nouméa is sent to its factory at Antwerp, and that produced by the Société du Mont Dô and the firm of De Bechade was, before the war, sent to Krupp's factory at Essen.

(6) POWER

There are hydro-electric works in connexion with the smelting industry at Pao and Yate; at Yate the works were in course of construction in 1914. The water-power in the streams must be considerable, and most of it is available throughout the year.

(C) COMMERCE

(1) *Organizations to promote Trade and Commerce*

There is a Chamber of Commerce and Agriculture at Numea. The Syndicat Agricole de la Nouvelle Calédonie represents the interests of the planters, and there is an agricultural bank, the Crédit Agricole de la Nouvelle Calédonie.

(2) *Exports and Imports*

The value of the imports for 1913 was £708,316, and of the exports £633,536. The figures for 1905 were £442,815 and £429,060 respectively.

Between 1905 and 1909 foreign trade decreased, but in 1910 a rapid upward movement began. Although the war inevitably exerted a retarding influence on imports and exports, the total value of foreign trade in 1914 amounted to £1,271,500 (32,073,000 fr.). A comparison of the statistics for the first six months of 1914 with those for the corresponding period of 1913 show an increase of £138,700 (3,500,000 fr.). At present, however, the import figures are abnormally swollen by the importation of mining machinery.

Of the exports in 1913, France took goods to the value of £256,350 (6,465,866 fr.). Next in order as customers came Belgium, Great Britain, the United States, Holland, Germany, and New Zealand. The only export to New Zealand was guano from the Huon Islands, which was exported by the Austral Guano Company, Limited, of Auckland.

Of the imports in 1913, goods to the value of £340,500 (8,587,325 fr.) came from France, but this sum did not represent so large an increase over the previous year's total as that attained by foreign goods; for transport from France, notwithstanding favourable tariff arrangements, is slow and costly. Of the foreign countries, Australia, as might be expected, sent the highest proportion of goods, the value in 1913 being £181,250 (4,571,525 fr.); next in order came Great Britain and Germany.

As to the imports of New Caledonia, it was stated in a Report of the Chamber of Commerce of Numea that

> 'Because of its distance from the mother-country and the high cost of freight, because of its geographical position which places the colony within three days' steaming from the Australian continent, an abundant producer of all the commodities of temperate climates, and because of the considerable resources of the great Australian cities, New Caledonia is rapidly coming to supply herself in Australia with everything required, at low prices and with credit facilities which are denied her by the French trade. And, no matter what new economic barriers may be erected, New Caledonia, even so, will be obliged to a very great extent to supply herself from Australia.'[1]

Further details as to foreign trade are given in Tables 2–5 of the Appendix.

(3) *Customs and Tariffs*

The French system of Customs duties (Tarif Métropolitain) provides for a 'general' tariff and a 'minimum' or 'preferential' tariff. By virtue of commercial treaties or special legislative provisions, certain countries, which extend to French goods their minimum tariffs, enjoy the minimum or preferential tariff in respect of all items subjected to the French tariff. Great Britain is, and Australia is not, included among the countries thus favourably treated. In relation, however, to certain especially exempted articles, the tariff for which is modified by decrees, the general and minimum rates of the metropolitan tariff do not apply.

This system prevails in New Caledonia. French goods are admitted free, except for an *octroi* charge to which all goods imported into the French Pacific possessions are subject. Normally this duty is 5 per cent. on the value of the imports.

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[1] *The Colonial Tariff Policy of France*, by A. Girault, 1916, p. 191.

The tariff is extremely complicated. With regard to certain goods it has been stated that it is impossible to say what the duty will be until a sample has been inspected.

(D) FINANCE

(1) *Public Finance*

The local budget for 1915, including receipts and expenditure, amounted to £172,350 (4,337,000 fr.).

(2) *Currency and Banking*

The currency in use is the French 5 fr. piece with its subdivisions; gold is rare.

At Numea there is a branch of the Banque de l'Indo-Chine which is privileged to issue notes current in the colony. Local bank rates in 1914 were 8 to 10 per cent. and private discount rates from 5 to 6 per cent. Money orders, payable in Paris at 1¼ per cent., can be obtained at the Treasury at Numea. Before the war these orders were accepted by merchants in European cities at their face value. Post office orders are issued between Australia and New Caledonia.

A certain amount of banking business is carried on, and banking facilities are given by local merchants.

LOYALTY ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

Throughout the islands there is a network of good cart-roads. These are maintained by the natives, who are compelled to furnish the necessary labour.

(2) *Anchorages*

The coasts in most places are steep, but there are several bays, at the head of which are sandy beaches, affording safe landing, except during onshore winds. No island is circled by a continuous reef. The best anchorage is in Sandal Bay, on Lifu, but it is obstructed in places by coral reefs. There are said to be several entrances to Uea lagoon, navigable by large ships; but they are not well charted.

(B) AGRICULTURE AND NATURAL RESOURCES

Vegetation on the islands consists mainly of coco-nut palms near the coast and a few scattered pines in the interior. The soil is thin, and drains rapidly. The natives cultivate a small quantity of yams, bananas, &c., for their own use.

Cotton is said to grow well, but there is little ground available for its cultivation.

Coco-nuts are the main article of commerce and their production constitutes the chief occupation of the natives. Sandalwood used to be the chief product, but is now said to be on the point of exhaustion.

The returns of exports are included in those of New Caledonia (see Appendix), no accurate figures being available for the Loyalty Islands alone.

HOORN AND WALLIS ISLANDS

(A) MEANS OF COMMUNICATION

Hoorn Islands.—There are no ports on either Futuna or Alofa; but each has a fairly good anchorage sheltered from the prevailing wind.

Both provisions and water are plentiful.

Wallis (*Uea*) *Island.*—The only channel through the reef, except for small boats, is at Honikulu on the south. There are two or three indifferent anchorages.

Pigs, poultry, yams, and bananas are obtainable, but water is very scarce.

In 1913 there was a monthly shipping service to Fiji, and a ship of 2,000 tons from Sydney called four times in the year.

(B) AGRICULTURE AND NATURAL RESOURCES

Labour is, as usual in the Pacific Islands, scarce and unsatisfactory. It has been frequently suggested that Korean or Japanese labour should be introduced.

The islands are capable of considerable agricultural development; at present the chief exports are copra, *bêche-de-mer*, and pearl shells. There are coco-nut plantations on some of the islands. It is possible that other industries, such as coffee and cocoa-growing and rubber-planting, could be carried on, but, as elsewhere in the Pacific, the inhabitants do not take kindly to new forms of cultivation. No separate returns of the imports and exports of the islands are available.

CLIPPERTON ISLAND

There is no entrance to the lagoon. The only possible anchorage is on the north-east side of the island, in 20 to 45 fathoms, and is unsafe owing to the frequent occurrence of northerly squalls. Landing at any other part is generally impossible on account of the surf; and the pier, 141 yds. long, on the south-west, is said to be useless for this reason.

The atoll lies about 200 miles north of the great circle track from Panama to Singapore, and has been suggested as a possible coaling station. The only means of constructing a safe harbour, owing to the deep water surrounding the atoll, would be to construct a passage into the lagoon. Some of the reefs inside the lagoon would need to be cleared away. The depth of the lagoon varies from a foot to 55 fathoms.

Guano deposits exist on the island. It has no other resources.

FRENCH SETTLEMENTS IN OCEANIA

SOCIETY ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

An excellent road, known as the Broom Road, extends all round the island of Tahiti, save for fifteen miles at the eastern end, where the cliffs are impassable. There is also telephonic communication.

(2) *Ports*

All the islands have anchorages within the lagoons, though in many cases, on account of the tortuous nature of the channel, they are accessible only for small vessels. The best harbours are at Papeete and Port Phaeton on Tahiti. There are also good harbours suitable for large vessels at Huahine, Moorea, Raiatea, Tahaa, and Bora Bora.

Papeete.—This is the chief port and best harbour on the island of Tahiti. It is enclosed between the shore and the barrier reef; through the latter there is a narrow channel, which, by dredging, has been deepened to allow vessels drawing 30 ft. to pass. The harbour affords anchorage in from 10 to 15 fathoms over a space of about a mile in length and half a mile in breadth, with good holding ground. There are several quays which offer accommodation to vessels of large size. The total wharfage available is 2,567 ft., with from 16 to 21 ft. of water alongside, while 25 ft. away from the wharf the depth is 28 ft. A wharf 650 ft. long and with 31 ft. of water alongside is projected. There is a coal hulk in the harbour and a coaling depot is to be built near the proposed wharf. There is a repair slip, which can take vessels of 500 tons.

Papeete is the most easterly of the good ports in the Pacific islands, and is bound to be of great importance if trade develops on the routes between Panama and Australia and New Zealand. The French are fully alive to this, and for some years had been discussing the improvement of the harbour and the establishment of a large coal depot, but though surveys and reports had been made, nothing more had actually been done up to the end of 1914.

Port Phaeton.—Port Phaeton is situated on the south of the isthmus of Taravao, which divides the island of Tahiti into two unequal parts. This natural port has an area of about 2 square miles, with a depth of from 30 to 100 ft., but is encumbered with coral patches. The principal entrance channel is about 130 ft. wide and 60 ft. deep

Bora Bora.—On the west of this island there is a magnificent roadstead, nearly 2 miles in length and averaging one mile in width. This harbour, though little used as yet, is probably superior to Papeete, and has been considered as a possible trans-oceanic port of call. It has an easy entrance with 5½ fathoms of water; and there is good commodious anchorage in 14 to 17 fathoms, well sheltered on the north side by rising land.

(3) *Shipping Lines*

The Union Steamship Company of New Zealand maintains a four-weekly service between Wellington and San Francisco, calling at Rarotonga and Tahiti. It receives a subsidy from the French local Government for carrying the Society Islands' mails, and the steamers are under a contract to remain at least 24 hours in port at Papeete, during each voyage. The same company also runs a steamer from Auckland every month to Papeete and back, calling at the principal Leeward Islands, and usually at one or more of the Hervey and Cook Islands as well.

Before the war the Compagnie navale de l'Océanie dispatched a vessel once a quarter from Antwerp, calling at Dunkerque and Bordeaux, with cargo for Numea and Tahiti; and it seems likely that this service may be resumed *via* the Panama canal. The New Zealand Shipping Company also maintains a monthly service from Plymouth to New Zealand *via* Panama, whose vessels sometimes call at Tahiti.

The Compagnie Navale de l'Océanie has established since 1913 a regular service for inter-insular trade, in which there are also engaged a varying number of small craft. All vessels engaged in this trade must sail under the French flag. Communications between the islands are yearly improving.

The shipping facilities, both inter-insular and external, have much improved during recent years. A return of the shipping at Papeete and Makatea in 1913 will be found in Table A of the Appendix, p. 63.

(4) *Wireless Communication*

There is a wireless telegraph station at Papeete, able to communicate with Samoa and Hawaii.

(B) INDUSTRY

(1) Labour

The islands suffer most seriously from a deficiency of labour. The whole colony, which could easily support some 200,000 inhabitants, has to-day barely 27,000, including Europeans, Americans, Chinese, and natives. The lack of labour is seriously handicapping industry, and the islands have probably almost reached the limit of production possible with the labour at present obtainable. Moreover, labour is not merely scarce, but also expensive. Probably the only solution of the problem lies in the importation of labour; this has been attempted on some of the islands, but never on a large scale. The immigration of Chinese during recent years has improved the prospect of the labour market. The effect of their arrival is, however, diminished by the fact that they engage chiefly in petty trade, thus leaving the supply of agricultural labour practically unaltered. In the western (Leeward) group of islands labour is rather more plentiful and somewhat better in quality than on Tahiti.

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

The mountain-sides and coastal plains are covered with forests, except where cleared for cultivation. Among the important native products are the coco-nut, bamboo, bread-fruit, sugar-cane, *ape*, and taro. These are cultivated, as well as cotton, coffee, tobacco, vanilla, the orange, lime, mango, and other fruit-trees. Manioc and maize grow well. It is calculated that on Tahiti and Moorea only 1 to 2 per cent. of the total cultivable area is under crops, in spite of the fertility of the soil.

At present copra and vanilla are the most important articles of export. Vanilla suffered a depreciation in the European markets at one time owing to poorness of quality caused by premature gathering and bad airing, but since the institution of a strict official control its quality has much improved.

The copra industry is the main source of wealth in Tahiti. The coco-nut palm yields in from six to ten years after its planting. It is probable that the islands have reached their maximum output of copra under the existing conditions of labour.

Cotton is grown, but the plants have been allowed to go on bearing unduly long. The Société Cotonnière Française has established itself on Tahiti, and a ginnery has been erected on Raiatea. The shortage of labour has, however, seriously affected the industry.

There are large quantities of fowls and wild ducks on Tahiti. Horses of a small but useful breed are numerous. There are few horned cattle, but sheep and goats are plentiful.

(b) *Forestry*

It does not appear that the forest resources of Tahiti, other than coco-nut palms, have been much exploited.

(c) *Land Tenure*

Genuine titles to land are at present very difficult to obtain, and any one buying a plantation or property on Tahiti is likely to find himself involved in litigation. Further, the natives are much opposed to selling or leasing land, even land which they do not cultivate. To meet this difficulty there has been some talk of the imposition of a land-tax which will compel the owner either to cultivate, lease, or sell his land. If the labour and land questions can be settled, there is probably a very fair opening for planters and companies in Tahiti.

(C) COMMERCE

(1) *Organizations to promote Trade and Commerce*

There are Chambers of Commerce and Agriculture at Papeete.

(2) *Exports and Imports*

The exports in 1913 were of a value of £462,180 (11,554,507 fr.); 51 per cent. went to the United

States, whose share in the trade of the islands is yearly increasing. The imports in 1913 were of a value of £361,219 (9,030,474 fr.); 47 per cent. came from the United States. The figures include the trade for the Tuamotu, Gambier, Marquesas, and Makatea Islands. Trade shows a considerable increase.

The value of the exports to the United States in 1913 was £231,907 (5,797,689 fr.). Next in order as buyers came France and her colonies, £63,156 (1,578,908 fr.), Great Britain, £61,817 (1,545,442 fr.), New Zealand, £10,316 (257,906 fr.), and Germany, £2,321 (58,047 fr.).

Exports of mother-of-pearl, fungus, and cotton were decreasing in 1913; those of other products increasing.

The value of the imports from the United States in 1913 was £171,218 (4,280,455 fr.). Next in order came New Zealand and Australia, £74,821 (1,870,538 fr.), France, £58,897 (1,472,434 fr.), Great Britain, Germany, and the French colonies.

Imports from all countries are increasing, more especially timber, benzine, and food-stuffs from the United States, and woven stuffs from Great Britain.

(3) *Customs and Tariffs*

In the case of Tahiti and its dependencies the *Tarif Métropolitain* does not apply, but special rates have been fixed for foreign merchandise. These rates are high, and are further increased by an *octroi de mer* ranging from 8 to 15 per cent. The average duty on imported foreign articles is about 31 per cent.

(D) FINANCE

(1) *Public Finance*

Receipts and expenditure for 1912 amounted to £145,082 and £127,631 respectively. The figures for 1908 were £80,861 and £80,832. More than half the revenue of the colony is derived from the customs and *octroi de mer*, four-fifths of which goes to the administration, and the remainder to the municipality. The value of the imports, and therefore the financial position of the colony, depends on the market obtained for the produce of the islands, as any increase in prosperity is always reflected in an increase of imports. Owing to the uncertainty produced by this situation, the administration wishes to form a reserve fund.

At the end of May 1913, there was a reserve of £43,530, and it was expected that at the end of May 1914 there would be an additional sum of £31,700.

(2) *Currency and Banking*

There is a branch of the Banque de l'Indo-Chine at Tahiti; there is also a Caisse Agricole or Agricultural Credit Bank, which was founded as far back as 1863. The currency is French; the notes of the Banque de l'Indo-Chine are also used.

(3) *Influence of Foreign Capital*

At the beginning of the war there were two important British firms and one or two others. These houses transacted 25 per cent. of the import and export trade, and their vested interests are greater than those of any other nationality in these waters.

Before the war there were three German firms which did 17 per cent. of the trade.

Notwithstanding the fact that the United States do so large a proportion of the trade of Tahiti, there is no American firm in the islands.

A large proportion of the vanilla export trade is in the hands of Chinese. They are to be found in every little village on Tahiti, and do a large business in distributing certain lines of imports.

TUBUAI ISLANDS

(A) MEANS OF COMMUNICATION

Ports

Each of the Tubuai or Austral Islands has one or more so-called ports, but there are only two good harbours, Raiurua in the island of Raivavae, and Ahurei Bay in Rapa Island, the remainder being only partially sheltered anchorages.

Raiurua.—Raiurua is at the western end of Raivavae. It is a large and deep bay, affording excellent anchorage in any wind. Owing to difficulties of navigation it is not used by sailing-vessels, but steam vessels of any size can enter or leave with safety. There is a stone wharf with two fathoms of water alongside.

Ahurei.—This is the best harbour in the Tubuai Islands. The entrance to the bay is narrow and intricate, though for the most part deep. The difficulty could be overcome by the removal of some of the reefs, but more serious drawbacks are the prevalent onshore winds to which the entrance is exposed, and the erratic squalls which blow down from the hills. The anchorage is well sheltered though rather deep—10 to 29 fathoms. The holding ground is not very good, being a thin layer of mud over coral, but the anchorage is so well protected that there is little danger of dragging. The bay is open to the eastward, whence the prevailing winds blow, but the reef and islands prevent the sea from entering, and the surface of the bay is always smooth. The bay is half a mile wide and 2½ miles long. Fogs are of fairly frequent occurrence over and in the immediate vicinity of the island. Supplies (goats, pigs, fruit, and vegetables) may be obtained at the villages, and there is a waterfall near Area village from the foot of which good water is obtainable.

For a long time these islands depended for communications upon the irregular visits of commercial steamers, which took place chiefly during the pearl fishery season. In 1914, however, a service between the French islands of the Pacific was instituted, through which the islands are visited twice a year.

(B) AGRICULTURE AND NATURAL RESOURCES

All the larger islands are thickly wooded, except near their summits. Some sandalwood is found. Bananas, oranges, and yams are grown and do well, while manioc, arrowroot, and sugar-cane are grown in small quantities. The principal product of the islands is taro, the fermented root of which is exported to the Tuamotu Islands. Coco-nuts do not flourish. There is little land available for agriculture and no scope for large plantations. Live stock, both wild and domesticated, is plentiful.

Conditions on the island of Rapa are much the same as on the other islands. Its importance lies in its possible adaptation as a coaling depot for trans-oceanic steamers. A deposit of coal, of unknown extent, has been found on the north side at an elevation of 650 ft. No serious attempt has been made to work it, though the surface coal has been tried and gave fair results when used in a French dispatch boat. A report from a French source states that the deposit, which is said to be lignite of a reasonably good quality, would be adequate for industrial purposes, but valueless as steam coal for marine engines.

TUAMOTU ARCHIPELAGO

(A) MEANS OF COMMUNICATION

(1) *Ports*

The seaward sides of the atolls in the Tuamotu or Low Archipelago are generally steep-to and afford no anchorage, while landing is impossible on account of the surf. Many of the lagoons have no entrance; others have only a boat passage. There are several good anchorages within the open lagoons, the best being in Fakarava, Toau, and Makemo. Others not quite so good are in Rahiroa (the largest atoll of the group), Raroia, Kauehi, Tahanea, and Tikehau.

Toau.—There are two channels into the lagoon, one of which is safe for vessels drawing 25 ft., while the other is suitable only for small vessels. The anchorage is reported to be good and the lagoon to be comparatively free from coral heads.

Fakarava.—Three channels lead into the lagoon, which is roughly rectangular, 32 miles in length by 10 miles in width. The best channel is the North Pass, which has a minimum depth of 6 fathoms, and is wide and clear of dangers. The South Pass is also deep enough for large vessels, but is somewhat intricate; it could, however, be improved by buoys and beacons. The anchorage has good holding ground in 7 to 14 fathoms, and there is a pier for landing. Winds from the south-south-east to the west-south-west through south tend to raise an unpleasant sea, but there is little danger of dragging. Supplies are not plentiful, but a few pigs and fowls may be obtained, and fairly good water may be got in small quantities by digging.

Makemo.—There are two entrances into the lagoon, that nearest the eastern end being available for large vessels, as it is deep and clear of dangers. The lagoon is fairly free from coral heads and shoals, and there is good anchorage in 7 to 8 fathoms off a mole at Puheva village. Pigs, fowls, and good water are obtainable. Many of the fish in the lagoons are poisonous.

These islands are very dangerous to shipping, as they are low-lying and difficult to see; further, as they are surrounded by deep water, it is not possible for ships to tell by sounding when they are approaching them, or to anchor if they are threatened with being driven ashore.

Makatea.—This island has no anchorage. Vessels moor to buoys in deep water off the jetty belonging to the Compagnie Française des Phosphates de l'Océanie.

(2) *Shipping Lines*

The service between the French islands of the Pacific, instituted in 1914, provides for visits to certain of the islands once every month.

(B) AGRICULTURE AND NATURAL RESOURCES

The chief resources of the islands are copra and mother-of-pearl. There is little cultivation except of a few fruits for native use.

Pearls and pearl-oysters are found in some of the lagoons; they are of a quality not inferior to those found in Ceylon. It seems probable that the oyster fishing is imperfectly supervised; if the lagoons were properly cultivated and restocked and the fisheries carried on by the best methods and effectively controlled, the export of mother-of-pearl could be very largely increased.

The value of the export of mother-of-pearl for 1912 was £32,000. The export of copra in 1912 amounted to 1,588 tons. This figure represents only about one-third of the total production of the islands, a large amount having been destroyed by rats. Normally, one-third of the produce is used by the inhabitants.

The exports are steadily increasing. In 1914 the export of copra amounted to 3,279 tons, and of mother-of-pearl to 282 tons. The corresponding figures for 1916 were 4,533 and 687.

Phosphate is found at Makatea. The deposits are of considerable importance, though relatively small compared with those believed to exist on other islands in the Pacific, for example Nauru (formerly German, now British) and Ocean Island (British).[1] Nauru alone is estimated to contain 300 million tons of phosphate, as against 10 million tons on Makatea. Too much weight should not be attached to estimates of this kind, but the deposits are undoubtedly among the most important assets of the French islands in the Pacific.

The phosphate on Makatea is, like all that found in the Pacific islands, of first-rate quality and, notwithstanding the heavy freight charges, it is able to compete in Europe with American phosphates. It has been exploited since 1906 by the Compagnie Française des Phosphates de l'Océanie, which has undertaken its development with energy and some success. Mining is easy, but loading conditions are difficult, owing to the steep nature of the coast and the want of anchorage. A pier 330 yds. long has been constructed; a hauling apparatus has been erected, as the cliffs are steep and inaccessible; and several miles of light railway have been built. In 1913 the exports of phosphates from Makatea are stated to have been of the value of £65,000 (82,000 tons), more than double the figures for 1912.

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[1] See 'The Phosphatic Wealth of Nauru' in the *British Australian* (London), for Dec. 4, 1919.

GAMBIER ISLANDS (OR MANGAREVA)

(A) MEANS OF COMMUNICATION

(1) *Roads*

The principal inhabited centres are linked together by mule paths, which are comparatively good, but lack of labour prevents their being properly maintained.

(2) *Ports*

There are three entrances into the lagoon. The best seems to be the south-east passage which has a minimum depth of 5½ fathoms. The only well-sheltered anchorage within the lagoon is Port Rikitea, the capital, situated on the eastern side of the island of Mangareva. It is now accessible only by vessels drawing not more than 12 ft. It has, however, been suggested that by clearing a part of the lagoon of coral heads a good anchorage for large ships might be formed, but the surveys made up to the present cannot be trusted.

The Gambier Islands lie very nearly midway between Wellington (New Zealand) and Panama, and, if a harbour could be made, would be valuable as a coaling station and port of call.

Water is obtainable, but the supply is indifferent.

(3) *Shipping Lines*

For many years the Gambier Islands were visited only at irregular intervals by small commercial steamers, chiefly during the pearl-fishery season, but in 1914 a service was instituted between the French possessions in the Pacific, by means of which the islands were regularly visited twice a year.

(B) AGRICULTURE AND NATURAL RESOURCES

Oranges, coco-nuts, and other tropical fruits are grown.

Goats and fowls are kept; fish are plentiful. The principal occupations of the natives are pearl-shell gathering and fishing. The value of the pearl-shell fisheries is estimated at between £10,000 and £15,000 per annum.

The cultivation of coffee is said to be gradually increasing, want of labour being the main difficulty in its production. Vanilla could be grown, but its production has never been undertaken. Cotton used to be cultivated, but has now been abandoned.

The exports are included in the figures given for the Society Islands.

MARQUESAS ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

Roads are very much needed, there being only mule paths, which are often in bad condition.

(2) *Ports*

Anchorages are numerous, but few of them are well sheltered from the ocean swell. There is, however, scarcely an island without at least one anchorage that will serve under any given conditions of wind and sea. On Hivaoa the harbours of Puamau, Hanaiapa, Hanamenu, and Taahuku are fairly good, but the best harbours are on Nukahiva, where Comptroller Bay, Taioa, and Taiohae or Anna Maria Bay are all safe. There is also a good harbour at Shavay Bay in Uahuka. Artificial harbour construction would be costly owing to the absence of sheltering reefs and the strength of the swell.

Pigs and fowls are obtainable on most of the islands, but it is frequently difficult to obtain fresh water except on Tauata.

Taioa.—There is a land-locked harbour here suitable for fair-sized vessels. One or two large vessels could enter, but the space with more than 7 fathoms of water is limited.

Taiohae.—This is a safe and comfortable harbour for all classes of vessels. About one square mile of its area is available for large ships. A bigger wharf is required. There are leading lights and a pier.

Shavay Bay.—This bay is protected to seaward by islets, and has good anchorage for any vessels in 10 to 15 fathoms with good holding ground.

(3) *Shipping Lines*

A motor schooner sails about eight times a year between certain of the Marquesas Islands and Tahiti.

(B) AGRICULTURE AND NATURAL RESOURCES

Cotton, sugar-cane, cassava, coffee, oranges, and other fruits are cultivated, besides coco-nuts and taro. Cotton used to be exported in fair quantities, but the export has now nearly ceased. The sole product of commercial importance at present is copra, of which about 1,500 tons are produced yearly. In 1914 1,200 tons, and in 1915 1,930 tons, of copra were received in Tahiti from the islands. Guavas grow wild.

Cattle, both wild and domesticated, are abundant in some of the islands.

The amount of cultivable land in proportion to the area of the islands is large, but little utilized.

On most of the islands are gaseous mineral springs of an alkaline nature, and there is a sulphur spring at Tarna Bay in Hivaoa; otherwise there are no minerals.

The exports are included in the figures for the Society Islands.

GENERAL REMARKS

With the exception of those islands which are of special economic importance owing to their mineral deposits, that is to say New Caledonia and Makatea, the prospects of all the French possessions in the Pacific are affected by the same main considerations.

All the islands are alike in suffering from shortage of labour and insecurity of land tenure. The unsatisfactory results obtained from convict labour, the unsuitability of the natives for regular work, and the failure to devise a successful system for the introduction of labour from outside have hitherto been the chief obstacles to the industrial progress of these colonies. At the same time a further hindrance is caused by the adverse effect of the lack of a settled land policy on the immigration of settlers and the investment of capital. The solution of these two problems is essential to the development of the islands.

Partly as a result of the labour conditions, copra is the main product in all the islands, with the exception of New Caledonia and Makatea. The growing demand for coco-nut oil as an ingredient in margarine is likely for some time to keep open a market for this product. Recently the local price of copra has rarely fallen below £20 per ton, a rate which admits of a satisfactory margin of profit. Central Africa with its enormous resources of oil-seeds of various kinds threatens to prove a serious competitor in the supply of European requirements. On the other hand, the removal of the restrictions that have hampered the development of the margarine and soap industries in Australia would result in a great increase in the Australian demand for copra. Since Lever Brothers established mills near Sydney, and sailing vessels were superseded by steamers, the export of copra from these islands to Australia has increased.

Other products of importance are to be found in the various islands, as, for example, coffee in New Caledonia, vanilla in the Society Islands ; but the development of these as of all other industries is dependent on the provision of an adequate supply of labour.

In the islands distinguished from the rest by the possession of minerals, there has been considerable economic development during the past few years. In New Caledonia, the increase in prosperity dates from the year 1910, in which ended the last of the periods of financial depression which have marked the colony hitherto. These crises have been attributed to fluctuations in the exploitation of the minerals of the colony, and the recent establishment of smelting works at Pao and Yate is the best provision against their recurrence. On the other hand, the dependence of the nickel industry on the much more considerable industry of Canada introduces an element of uncertainty into the prospects of the colony.

M. Girault is of opinion that the subjecting of New Caledonia to the provisions of the National Customs Tariff has been the main cause of the slow development of the colony, and expects great results from the proposed measure to remove New Caledonia from the list of 'assimilated' colonies.[1]

Another factor in the development of the islands is the possibility, to which reference has been made, that the trade routes between the American and Australian continents might be deflected to touch certain of the ports. This has already taken place to some extent, regular calls being made at Tahiti by steamers of the Union Steamship Company of New Zealand, once a month each way, and occasional calls by those of the New Zealand Shipping Company using the Panama Canal to and from England. It may be hoped that improved communications will lead to an increased interest in the colonies and to the removal of the obstacles that hinder their progress.

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[1] *The Colonial Tariff Policy of France*, 1916.

APPENDIX

NEW CALEDONIA

Table 1

Return of Shipping at Numea and other Ports in New Caledonia in 1913[1]

Entered.

Nationality.	*With cargo.*		*In ballast.*	
	Vessels.	*Tonnage.*	*Vessels.*	*Tonnage.*
French	33	81,099	3	6,366
British	1	2,216	8	24,020
Norwegian	—	—	8	14,833
German	—	—	1	3,718
United States	1	525	—	—
Japanese	—	—	1	1,897
Total	35	83,840	21	50,834

Cleared.

Nationality.	*With cargo.*		*In ballast.*	
	Vessels.	*Tonnage.*	*Vessels.*	*Tonnage.*
French	32	85,743	—	—
British	6	18,886	2	5,066
Norwegian	6	11,842	—	—
German	1	3,718	—	—
United States	—	—	1	525
Japanese	—	—	1	1,897
Total	45	120,189	4	7,488

Note.—S.S. *Pacifique* (Messageries Maritimes) and S.S. *St. Louis* (Union Commerciale de Navigation Calédonienne), which make regular four-weekly trips to Sydney, are not included in this list.

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[1] British Consular Report for the year 1913 on the Trade of New Caledonia.

TABLE 2

Return of Exports, 1908, 1913, 1914.[1]

	1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Bêche-de-mer	45,662	23,749	22,582
Coffee	609,364	1,478,774	864,968
Copra	432,926	1,902,312	1,438,949
Cotton and cotton seed	1,100	415,231	614,364
Essences	76,579	19,290	14,922
Guano	104,000	84,000	120,000
Hides, skins, raw wool, bones, and hoofs	242,185	460,926	467,640
Lard	26,024	61,526	53,100
Maize	37,423	35,652	35,429
Minerals			
Nickel matte	—	3,753,791	3,625,567
Nickel ore	4,200,939	2,858,635	2,824,020
Chrome ore	2,091,626	1,829,102	2,707,184
Cobalt matte	—	—	43,236
Cobalt ore	390,329	—	80,960
Pearl shells	162,038	931,757	558,108
Preserved meat	423,596	609,623	869,790
Rubber	90,111	14,647	1,588
Sandalwood	124,529	86,251	63,865
Wines, spirits, &c.	136,553	188,506	186,441
Miscellaneous	915,863	1,084,633	875,894
Total	10,110,847	15,838,405	15,468,607

[1] *Statistiques du Commerce des Colonies Françaises.*

TABLE 3

Countries of Destination of Exports, 1908, 1913, 1914.[1]

(*a*) Minerals.

		1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Australia	Nickel ore	—	15	2,894
	Chrome ore	147,298	—	19
	Cobalt ore	82,102	—	—
Belgium	Nickel ore	489,103	849,282	550,386
	Nickel matte	—	2,121,174	1,657,851
	Chrome ore	6,706	—	416,823
France	Nickel ore	1,253,827	426,797	700,794
	Nickel matte	—	732,617	—
	Chrome ore	10,912	92,068	223,683
	Cobalt ore	156,082	—	—
Germany	Nickel ore	430,635	374,005	306,178
	Chrome ore	—	—	347,472
Holland	Nickel ore	206,451	66,597	—
	Chrome ore	605,372	474,876	350,254
United Kingdom	Nickel ore	1,820,923	1,141,939	1,263,768
	Nickel matte	—	900,000	1,754,138
	Chrome ore	714,250	542,598	424,810
	Cobalt ore	152,145	—	80,960
	Cobalt matte	—	—	43,236
United States	Nickel matte	—	—	213,578
	Chrome ore	607,088	719,560	944,123
Total		6,682,894	8,441,528	9,280,967

[1] *Statistiques du Commerce des Colonies Françaises.*

(*b*) Other goods.

		1908. Francs.	1913. Francs.	1914. Francs.
Australia	Copra	130,352	172,427	107,067
	Hides	214,705	443,843	445,489
	Miscellaneous	429,083	215,585	161,125
France	Coffee	608,069	1,474,635	861,720
French Colonies	Copra	294,174	1,730,085	1,331,882
	Mother-of-pearl shell	160,806	927,740	548,647
	Preserved meat	389,462	583,002	768,294
	Miscellaneous	239,100	713,063	913,811
New Hebrides	Metal goods	64,965	60,323	90,257
	Rice	73,572	113,281	75,013
	Textiles	87,372	133,363	64,450
	Wines, spirits, &c.	100,698	136,217	121,546
	Miscellaneous	370,855	456,672	341,348
New Zealand	Guano	—	84,000	120,000
Other countries and ships' provisions	Miscellaneous	264,740	152,641	236,991
Total		3,427,953	7,396,877	6,187,640
Grand Total		10,110,847	15,838,405	15,468,607

TABLE 4

Return of Imports, 1908, 1913, 1914.[1]

	1908. Francs.	1913. Francs.	1914. Francs.
Boots and shoes	195,534	328,358	274,782
Cheese and lard	180,535	290,831	168,659
Coal	216,189	984,929	1,479,200
Coffee	—	500,473	465,028
Copra	—	146,854	478,950
Flour	984,835	943,071	959,311
Iron:			
Manufactured articles	770,525	2,211,844	1,408,446
Rails	125	111,885	41,284
Galvanized iron	111,910	242,797	44,893
Maize and rice	466,519	567,885	546,927
Paper	95,069	113,289	112,518
Petroleum	159,914	293,231	244,754
Potatoes	—	170,292	164,943
Preserved meat	48,663	70,242	51,104
Sugar	242,097	406,948	408,574
Textiles (including manufactured goods)	1,262,929	2,284,778	1,844,934
Tobacco, cigars, and cigarettes	335,110	445,076	381,243
Wine	1,053,900	1,683,192	1,522,557
Wood	73,541	222,894	389,669
Miscellaneous	3,110,034	5,689,047	5,616,658
Total	9,307,429	17,707,916	16,604,434

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[1] *Statistiques du Commerce des Colonies Françaises.*

TABLE 5

Countries of Origin of Imports, 1908, 1913, 1914.[1]

		1908.	*1913.*	*1914.*
		Francs.	*Francs.*	*Francs.*
Australia	Flour	984,835	942,969	959,234
	Metal goods	212,453	344,619	421,796
	Textiles	129,697	311,914	260,368
	Miscellaneous	1,938,846	2,972,023	3,131,011
Belgium	Coal	(see note 2)	281,969	466,789
	Miscellaneous	—	307,673	403,038
France	Metal goods	515,376	871,463	586,698
	Textiles	999,700	1,715,181	1,414,172
	Wines, spirits, &c.	1,279,928	2,047,141	1,794,045
	Miscellaneous	2,400,595	3,953,540	3,323,481
French Colonies	Rice	299,531	301,738	—
	Miscellaneous	2,146	16,162	63,667
French bonded warehouses	Miscellaneous	(see note 2)	848,997	621,907
Germany	,,	7,027	104,727	—
Japan	,,	(see note 2)	61,254	202,432
New Hebrides	Coffee	12,582	497,539	462,851
	Copra	41,266	146,854	444,807
	Cotton	—	467,971	546,552
	Miscellaneous	124,364	147,604	293,456
New Zealand	Miscellaneous	—	49,868	100,146
United Kingdom	Coal	—	377,698	449,158
	Metal goods	17,058	535,409	12,424
	Miscellaneous	149,505	206,897	55,500
United States	Miscellaneous	3,677	118,330	222,642
Other countries	,,	188,843[2]	78,376	368,260
Grand total		9,307,429	17,707,916	16,604,434

[1] *Statistiques du Commerce des Colonies Françaises.*

[2] This figure includes such imports as there were from French bonded warehouses, Belgium, New Zealand, and Japan.

FRENCH SETTLEMENTS IN OCEANIA

TABLE A

(1) *Return of Shipping at Papeete and Makatea*, 1913.[1]

	Vessels.	*Tonnage.*
Papeete.		
Entered	69	219,619
Cleared	62	210,476
Makatea.		
Entered	17	40,016
Cleared	19	43,493
Total	167	513,604

[1] British Consular Report on the Trade and Commerce of the Society Islands in 1913.

(2) *Nationality of Shipping entered and cleared at Papeete and Makatea*, 1913.

	Vessels.	*Tonnage.*
France	27	81,090
Japan	5	15,393
Norway	—	—
United Kingdom	100	400,309
United States	35	16,812

(3) *Return of Inter-insular Trade*, 1913.[1]

	Vessels.	*Tonnage.*
Entered	246	10,026
Cleared	255	10,146
Total	501	20,172

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[1] British Consular Report on the Trade and Commerce of the Society Islands in 1913.

TABLE B

Return of Exports, 1908, 1913, 1914.[1]

	1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Bêche-de-mer	37,115	2,388	588
Bees-wax	7,459	8,990	3,621
Coco-nuts	81,153	123,223	113,058
Copra	1,276,312	4,419,964	3,523,635
Cotton	30,436	46,104	28,673
Fungus	28,641	11,326	895
Mother-of-pearl	795,618	987,740	721,184
Oranges	41,578	59,420	85,584
Phosphates	—	1,641,134	1,458,495
Vanilla	693,644	4,032,507	2,413,648
Miscellaneous	153,372	221,711	168,571
Total	3,145,328	11,554,507	8,517,952

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[1] *Statistiques du Commerce des Colonies Françaises.*

TABLE C

Countries of Destination of Exports, 1908, 1913, 1914.[1]

		1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Australia and New Zealand	Copra	41,635	119,629	116,497
	Miscellaneous	167,075	138,277	264,495
France	Copra	—	933,154	1,175,505
	Vanilla	64,972	514,835	342,343
	Miscellaneous	76,934	130,919	272,825
Germany	Miscellaneous	55,948	58,047	7,792
United Kingdom	Copra	20,342	606,669	15,508
	Mother-of-pearl	721,596	838,463	435,021
	Vanilla	19,216	98,226	17,940
	Miscellaneous	3,022	2,084	26,032
United States	Copra	959,764	2,225,183	2,216,175
	Vanilla	547,756	3,339,804	1,889,479
	Miscellaneous	97,256	232,702	228,617
Other countries	Miscellaneous	369,812	2,316,515	1,509,723
	Total	3,145,328	11,554,507	8,517,952

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[1] *Statistiques du Commerce des Colonies Françaises.*

TABLE D

Return of Imports, 1908, 1913, 1914.[1]

	1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Benzine	40,828	167,544	147,516
Biscuits	79,126	152,247	158,849
Boots and shoes	54,596	186,323	151,502
Butter (salted)	82,935	191,747	163,373
Cattle	31,432	98,058	134,469
Coal	43,210	228,403	92,672
Condensed milk	25,893	83,010	112,379
Fish	107,883	283,193	191,820
Flour	397,499	660,450	627,741
Metal goods	310,769	831,974	697,913
Metals	76,230	183,721	194,682
Planks	97,550	273,150	212,673
Preserved meat	144,445	420,523	405,368
Rice	85,393	246,341	212,515
Soap	88,090	158,988	141,402
Sugar	25,424	177,960	180,788
Textiles	863,952	1,408,430	1,355,649
Timber	87,146	314,931	202,167
Wines, spirits, &c.	116,714	355,147	319,642
Miscellaneous	1,108,748	2,608,334	2,723,909
Total	3,867,863	9,030,474	8,427,029

[1] *Statistiques du Commerce des Colonies Françaises.*

TABLE E

Countries of Origin of Imports, 1908, 1913, 1914.[1]

		1908. *Francs.*	*1913.* *Francs.*	*1914.* *Francs.*
Australia and New Zealand	Butter	80,179	191,311	163,214
	Preserved meat	136,841	412,130	368,727
	Sugar	3,759	130,137	128,359
	Miscellaneous	553,103	1,136,960	1,114,363
France	Metal goods	37,358	182,090	108,792
	Textiles	199,575	382,158	452,093
	Wines, spirits, &c.	92,848	226,468	196,358
	Miscellaneous	284,987	681,718	661,616
French Colonies (New Caledonia)	Miscellaneous	—	82,898	41,262
Germany	Metal goods	6,824	101,334	23,585
	Miscellaneous	68,975	130,196	187,289
United Kingdom	Textiles	319,218	364,312	377,920
	Miscellaneous	114,933	236,936	252,859
United States	Fish	87,818	223,973	148,586
	Flour	396,220	600,374	627,351
	Metal goods	174,624	424,751	459,652
	Textiles	239,336	540,798	381,965
	Miscellaneous	865,434	2,490,559	2,318,369
Other countries	Miscellaneous	205,831	491,371	414,669
	Total	3,867,863	9,030,474	8,427,029

[1] *Statistiques du Commerce des Colonies Françaises.*

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MAPS

The French Possessions in the Pacific are shown on Stanford's Map of the Pacific Islands (London Atlas Series), on Mercator's projection, 23 inches by 18 inches.

The Naval Staff Intelligence Division have issued a map of New Caledonia, on the scale of 1 : 1,500,000, and Tahiti, on the scale of 1 : 750,000 (Ordnance Survey, January 1919), in connexion with this series.

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I. GEOGRAPHY PHYSICAL AND POLITICAL

THE former German island possessions in the Pacific Ocean in 1914, and their approximate land areas in square miles, were as follows:—

New Guinea Protectorate:	
Kaiser Wilhelmsland	70,110
Bismarck Archipelago (with Bougainville and Buka)	21,700
Caroline and Palau (Pelew) Islands ...	550
Mariana Islands (excluding Guam) ...	241
Marshall Islands (with Nauru Island)	176
Samoa	1,000
Total	93,777

With the exception of Samoa all these islands lie in the western Pacific, embracing practically all the islands between New Guinea to the south, the Philippines to the west, the parallel of 20° north and about the meridian of 172° east. Within this area there are, however, certain islands which did not belong to Germany, principally the British Solomon Islands and the island of Guam (United States). There were no islands of disputed ownership within the German area.

Kaiser Wilhelmsland and the Bismarck Archipelago (including Buka, Bougainville, and other outlying islands) constituted German Melanesia; the Caroline, Palau, Mariana, and Marshall islands constituted German Micronesia.

KAISER WILHELMSLAND

(1) POSITION AND FRONTIERS

Kaiser Wilhelmsland was the northern section of eastern New Guinea. Between it and British New

Guinea, or Papua, the boundary ran from the east coast along the parallel of 8° south as far as 147° east longitude, thence by a straight line to a point at 6° south latitude and 144° east longitude, and thence by a straight line to the meeting-place of 5° south latitude and 141° east longitude. Between it and Dutch New Guinea the boundary was the meridian 141° east longitude. The area, including islands off the coast, covered 70,110 square miles, or about 22 per cent. of the total area of the island of New Guinea. The boundaries were good natural ones, and were so fixed owing to troubles with the natives, although they are practically inaccessible except to the hill tribes. European influence has never reached the frontier lands between German, British, and Dutch New Guinea from any direction.

(2) SURFACE, COAST, AND RIVERS

Surface

The interior is rugged and mountainous, with heights reaching to over 11,000 ft., but it is little known. The mountain ranges approach the coast, leaving comparatively little land near sea-level, but this narrow strip is extraordinarily fertile. All trade and communications are by sea along the coast, and the interior is left wholly to the native population.

Coast

The coast-line, which is about 750 miles long, is in parts fringed with coral reefs, and there are many small, lofty islands along its course. Except for Huon Gulf in the little-developed east of the country there are no deep inlets. Langemak Bay has commodious anchorage in deep water, and Finschhafen has land-locked anchorage for small vessels. In Astrolabe Bay are two or three sheltered harbours, including Konstantinhafen, Friedrich Wilhelmshafen, and Alexishafen, which are the best on the coast. There are many other anchorages fit for schooners and small steamers in certain winds.

Rivers

Little is known of the rivers of Kaiser Wilhelmsland, but the Sepik or Kaiserin Augusta and the Ramu are navigable. The many hill streams afford an abundant water supply, which is said to be of good quality.

(3) CLIMATE

The climate near sea-level is hot and moist all the year round, with a mean temperature of about 80° F. (26·5° C.). There is no cool season, and rain falls in all months. In Astrolabe Bay and in the west of the country the heaviest fall is from November to March, a season during which north-westerly winds prevail. In the east, round Huon Gulf and Finschhafen, the rainiest season is from May to September. The annual rainfall on the coast varies from 100 to 150 in. (2500 to 3750 mm.).

(4) SANITARY CONDITIONS

The climate is unhealthy. Dysentery is prevalent among the natives, and epidemics are frequent. There have been occasional outbreaks of small-pox. Elephantiasis occasionally occurs, and a skin disease known as Tokelau ringworm is common.

Malaria, dysentery, and other tropical diseases attack Europeans, and the death-rate is high. It does not seem probable that Europeans are ever likely to thrive in Kaiser Wilhelmsland, as, even apart from diseases, the enervating nature of the climate is very trying.

(5) RACE AND LANGUAGE

The natives are for the most part mixed Papuans and Melanesians, split up into many tribes, between whom there is continual strife. Head-hunting and cannibalism are practised. The unwillingness of the natives to work has led to the importation of labour from the Admiralty and Bismarck Islands, and Buka (Solomon Islands), as well as from Java.

The medium of intercourse between traders and natives is chiefly *bêche-de-mer* English, but efforts to spread the German language met with some success.

(6) POPULATION

The native population is estimated at about 545,000; the white population in 1913 was 968. There were also about 100 Chinese. There are many small native villages, but the only places of importance are the European trading stations on the coast such as Finschhafen, Stephansort, and Friedrich Wilhelmshafen. Under German rule Kaiser Wilhelmsland was administered from Rabaul, in New Britain.

BISMARCK ARCHIPELAGO

(1) POSITION AND EXTENT

The Bismarck Archipelago includes all the islands between the Equator and 8° south latitude, and between 141° and 154° east longitude, as well as a few small groups farther east. Within this area are New Britain or Neu Pommern, the Duke of York Islands or Neu Lauenburg, New Ireland or Neu Mecklenburg, New Hanover (Neu Hannover), and the Admiralty or Manus Islands (Admiralitäts-Inseln), besides various groups of small islands. Two islands of the Solomon group are German, namely, Buka and Bougainville, and these, as well as the small groups of the Abgarris or Fead, Sir Charles Hardy or Nissan (Grüne Inseln), Carteret, Mortlock, and Tasman islands, were included in the Bismarck Archipelago.

New Britain covers an area of about 9,200 square miles; New Ireland 5,000; New Hanover 380; Sir Charles Hardy or Nissan (Grüne Inseln) 1,000; Bougainville and Buka 3,500 and 200 respectively.

(2) SURFACE AND COASTS

Surface

The islands are in general mountainous, with level ground only near the coasts. There are, however, a few low-lying atolls among them. The former German Solomons are equally rugged, especially Bougainville, which contains mountains reaching 10,000 ft.

The soil is everywhere fertile except on the low coral islands, where fresh water is scarce.

Coasts

The coasts of the large islands generally rise fairly steeply from the water, with bold headlands; but as a rule there is a beach, often overgrown with mangroves. Sunken rocks and coral reefs fringe many of the coasts, especially those of the low islands.

There are many good harbours, the chief being Blanche Bay, in New Britain, containing the good anchorages of Matupihafen and Simpsonhafen, and Käwieng Harbour, in New Ireland, Mioko in the Duke of York Islands, Peterhafen in the French Islands, Nares Harbour in the Admiralty Islands, and Queen Carola Harbour in Buka Island.

(3) CLIMATE

The climate is essentially the same as that of Kaiser Wilhelmsland, except that during the prevalence of the south-east trades from May to September or October there is a comparatively dry season. November to March is the period of torrential downpour, accompanied by north-west winds and occasional calms. The islands are outside the area of typhoons.

(4) SANITARY CONDITIONS

The climate is unhealthy, and the same conditions obtain as in New Guinea. There is also much venereal disease, except in Buka, which is fairly free from European influence. Chicken-pox in an aggravated form is common, and, before it was understood, was dangerous. Among whites the death-rate is high, malaria, dysentery, and black-water fever being prevalent.

(5) RACE AND LANGUAGE

The natives are mainly Melanesians, but there are many racial elements which differ from one another in appearance, manners, customs, and speech. The Admiralty Islanders show a Papuan and perhaps Polynesian admixture, and the natives in the extreme west of the Archipelago have Malay or even Chinese affinities.

Most of the islanders are energetic and of good physique, with the exception of those on some of the smaller western islands and the inhabitants of the Gazelle Peninsula, who are weak and much diseased.

The Buka Islanders were considered by the Germans to be the best workers, and were largely recruited for police duties. The Admiralty Islanders are also very virile and are good sailors.

The prevalence of cannibalism and head-hunting largely accounts for native attacks on Europeans, but these affrays are also partly due to the methods employed in recruiting labour for Queensland, Samoa, and other Polynesian Islands, which have left a bad impression of white men on many islands. In 1888 the Germans virtually prohibited the export of labour from the Bismarck Archipelago. The natives of the smaller islands are generally peaceful.

There are many native dialects, but the only *lingua franca* is *bêche-de-mer* English.

(6) POPULATION

On the whole the population is dense, and is estimated at about 260,000. Buka and Bougainville (60,000) are especially well populated. The population of the Anchorite, Hermit, and L'Echiquier Islands, on the other hand, is rapidly dying out through disease and in-breeding. The chief European settlement is Rabaul on Simpsonhafen in New Britain, which was the administrative centre of the whole New Guinea Protectorate. Its population in 1914 was about 3,300, of whom about 2,500 were natives, 450 Chinese, and only 266 whites. Other centres of some importance are Herbertshöhe on the Gazelle Peninsula, Käwieng in New Ireland, and Kieta at Bougainville. There are many native villages in the interior of the larger islands.

The total white population at the beginning of 1914 was 821. There were also about 700 Chinese and 41 Japanese.

CAROLINE AND PALAU ISLANDS

(1) POSITION AND EXTENT

The Caroline and Palau (Piliu, Palaos, or Pelew) Islands (divided into an Eastern and a Western District by the meridian 148° east longitude) number about 450, and their total land area is about 550 square miles. They are arranged in some 48 groups, lying between the Equator and latitude 10° north, with the Marshall Islands to the east and the Philippines to the west.

(2) SURFACE AND COASTS

Surface

The larger islands are lofty volcanic peaks, generally fringed with coral reefs. The smaller islands are mostly atolls (*i.e.*, islets surrounded by reefs). Ponapi (Ponape, Puinipet), the largest island, one of the eastern Carolines, is 134 square miles in area, and rises steeply in the interior to a height of 2,861 ft. Yap (Uap, Eap), in the western Carolines, covers 80 square miles. It is volcanic, and rises to a height of 1,050 ft. Kusaie (Ualan), in the eastern Carolines, is 42 square miles in area, rising to a height of 2,155 ft. The Truk (Ruk) or Hogolu Islands are a group of ten lofty volcanic islands and many low coral islands lying in a lagoon, with an area of 50 square miles.

In the Palau group Babeltaob (Babelthuab) is the largest island, and rises to a height of 1,968 ft. Together with other islands lying within the barrier reef, it has an area of about 120 square miles.

All of these islands have more or less level, fertile, alluvial ground. Most of the remaining Caroline Islands are small coral reefs.

There is abundant water on all the lofty islands, but many of the coral islands have to rely on rainwater.

Coasts

Practically all the islands are surrounded by coral reefs, through which there are entrances to sheltered lagoons. Some of the larger islands rise in places in steep cliffs from the lagoon, but all islands have several good landing-places, available in nearly all weathers, provided a vessel can enter the lagoon.

The chief harbours are Ponapehafen, Tomilhafen on Yap, and Chabrolhafen, also known as Löllö or Léléhafen, in Kusaie. In the Palau Islands the best anchorage is Malakal Harbour.

(3) CLIMATE

The temperature is about 81° F. (27° C.) all the year round, but the heat is tempered by the trade-winds, which generally blow from October to May. Rain falls in all months, but particularly from June to September, the total annual fall being from 100 to 200 in. (2500 to 5000 mm.). Typhoons occasionally occur between August and November, and are most frequent in the western Carolines.

(4) SANITARY CONDITIONS

Dysentery, tuberculosis, and venereal diseases are common among the natives. For Europeans the climate is much healthier than that of the Bismarcks and New Guinea, especially during the prevalence of the trade-winds.

(5) RACE AND LANGUAGE

The chief stock is Micronesian with Malay admixture; but there was probably an earlier population, perhaps of a different Polynesian stock, which built the remarkable stone monuments on Yap and other islands. In the eastern Carolines there has been a strong infusion of Marshall Islanders in recent times. The islanders seem to be peacefully disposed towards white men, although they sometimes engage among themselves in civil war and head-hunting.

Many dialects are spoken. English is more generally understood than German, and Japanese is now being taught on some islands.

(6) POPULATION

The native population is dense, particularly in the central Carolines, and the estimated total for all the islands is about 40,000. In 1911 the white population of the Carolines, Palaus, and Marianas was 148, of which 118 were Germans. There are also some Chinese and Japanese.

The only settlements of any importance are on Yap, Ponape, and Koror, the seats of the former German administration.

MARIANA ISLANDS

(1) POSITION AND EXTENT

The Mariana or Ladrone Islands extend north and south for 450 miles from Guam (Guahàn, Guayan, belonging to the United States), in latitude 13° 26′ north, to Farallon de Pajaros, or Uracas, in latitude 20° 33′ north, and lie between 144° and 146° east longitude. Exclusive of Guam, the total land area of the group is 241 square miles.

(2) SURFACE AND COASTS

Surface

All the islands are volcanic and lofty, with summits varying from about 1,000 to 3,000 ft.

The water supply is derived from mountain streams, and since it is entirely dependent on rainfall it is somewhat precarious on the small islands. The soil is fertile, but there is comparatively little level ground suitable for cultivation.

Coasts

Most of the islands rise in steep cliffs from the sea, and landing is impossible except on a few beaches. The anchorages in most islands are only open roadsteads. The best of these is Tanapag Harbour in Saipan. The best harbours in the group are in Guam, where the United States propose to make a naval base and coaling station at Caldera de Apra.

(3) CLIMATE

The average temperature throughout the year ranges from 73° F. (22·8° C.) in February to 79° F. (26° C.) in August. North-east trade-winds prevail except from June to October, when the wind is generally south-east to south-west. Destructive typhoons occur occasionally, most frequently in October and November. The rainy season is from August to October or November.

(4) SANITARY CONDITIONS

The climate does not seem to be unhealthy to Europeans, but accurate information is lacking. The wet season is the least healthy. Among the natives skin diseases are common, and there is a good deal of leprosy.

(5) RACE AND LANGUAGE

The native population is very mixed. In 1912 it included Chamorros (an aboriginal race of Micronesian stock), 1,920; Caroline Islanders, 1,109; Samoans, 69; of doubtful affinity, 13. The inhabitants have many of the defects of half-caste races, but are peaceful and not unwilling to work.

Apart from native tongues Spanish is the prevalent language, but there are no other vestiges of Spanish rule.

(6) POPULATION

The native population, which is now estimated at a little over 3,000, has decreased considerably. The only village of any size is Garapan on Tanapag Harbour in Saipan. There are a few Europeans, and in 1914 there were 100 Japanese.

MARSHALL ISLANDS

(1) POSITION AND EXTENT

The Marshall Islands, divided into the north-eastern Radack (Ratak) and the south-western Ralick (Rälik) group, lie to the north-west of the Gilbert Islands and extend between 4° 34′ and 14° 50′ north latitude and 160° 50′ and 172° 15′ east longitude. Nauru or Pleasant Island, lying to the south-west of the group, was included in the administration of the Marshalls.

The group consists of two nearly parallel chains of low coral islands, with a total area of about 176 square miles.

(2) SURFACE AND COASTS

Surface

The islands are atolls, all low-lying, and of coral formation, with a height rarely exceeding 12 ft. Kwajalin lagoon is 60 miles across. Nauru Island is about 12 miles in circumference.

The soil is fertile, but there is little ground available for cultivation.

Coasts

Most of the lagoons afford anchorage, but the entrance is often difficult. The best anchorages are in the lagoons of Wotje or Romanzov atoll and of Jaluit or Bonham atoll. On Nauru and Jaluit Islands short piers have been built.

(3) CLIMATE

The climate is hot and moist, with a mean temperature of about 80° F. (26·5° C) all the year round. The prevailing winds are light north-east trades. Rain falls heavily in all months, but least in January and February. Typhoons occasionally occur.

(4) Sanitary Conditions

The climate does not appear to be unduly trying to Europeans. Dysentery occurs, but there is little malaria. The inadequate water supply is, however, a danger. The natives suffer from elephantiasis, leprosy, skin diseases, and syphilis.

(5) Race and Language

The people are of Micronesian stock, but on Nauru Island there are about 1,500 Polynesians from the Gilbert and Ellice Islands, and a few on other islands. Some Marshall Islanders used to migrate to the eastern Carolines, but that has now ceased. On the whole the Marshall Islanders form a distinctive race. The native language is more or less the same throughout the group, but differs from that of the Carolines.

(6) Population

Some islands are densely populated; others have few or no inhabitants. The total native population is now about 11,200.

The white population in 1913 was 179, including 76 Germans. The chief settlement is on Jaluit.

SAMOA

(1) Position and Extent

The former German Samoan Islands extend between 13° 25′ and 14° 3′ south latitude and 171° 21′ and 172° 48′ west longitude, and consist of two main islands and a few smaller ones. The chief are Savaii, area 660 square miles, and Upolu, area 340 square miles, including a few islets off the coasts.

(2) Surface and Coasts

Surface

The islands are volcanic. Savaii rises by gentle slopes from wide coastal plains to an altitude of about

5,400 ft. On Upolu the plains are narrower, and there is a central range rising to many peaks between 2,000 and 3,600 ft. in height.

There are numerous short streams on Upolu and a few on Savaii. The volcanic rock readily decomposes into a porous soil of great fertility, but in some plains on the north the ground is rather stony and there is insufficient water.

Coasts

Practically all the coast-line of Upolu is fringed with coral reefs except on the north-east; off Savaii they occur to the east and off most of the inlets. The reefs protect the coast and facilitate landing, but entrances and anchorages for large vessels are not numerous. On Savaii Island Salailua is the best of several bad harbours; on Upolu the harbour of Apia is commodious but open to the north. Saluafata Harbour, also on the north coast of Upolu, offers better protection but is not large.

(3) CLIMATE

The climate is warm and humid with a mean temperature of about 80° F. (26·5° C.) throughout the year. In the interior the temperature is several degrees lower. The winds are generally south-east to east and are rarely interrupted by calms and westerly winds. Hurricanes are apt to occur between December and April. Rain falls in all months, but is heaviest from November to April. The total annual fall at Apia averages about 114 in. (2900 mm.).

(4) SANITARY CONDITIONS

To Europeans the climate is healthy, though distinctly enervating. Among the natives the chief diseases are elephantiasis, dysentery, whooping-cough, and framboesia (yaws). Eye diseases are common. Leprosy occurs rarely and is not increasing. The Chinese have introduced beri-beri.

The water supply is poor in many places.

(5) RACE AND LANGUAGE

The natives are Polynesians, allied to the other races of the central Pacific and strongly contrasted with the more primitive races of Melanesia. There has been a rapid increase in the number of half-castes (1,400 in 1914).

The Samoan language is a distinctive Polynesian tongue and is fairly difficult to learn. English is widely spread and is generally used in trade, as it was even under the German administration.

(6) POPULATION

The population is fairly dense, and is slowly increasing. In 1911 the natives numbered 21,182 in Upolu and 12,372 in Savaii, a total of 33,554. The inhabitants are settled in numerous villages round the coasts; the interior is sparsely inhabited. Apia, the headquarters of the administration, is the only town; it has a population of a few thousands.

In 1913 the white population numbered 544, of whom 329 were German and 140 British. There were also 2,083 Chinese, and 1,422 non-native inhabitants of mixed race.

The influenza epidemic of 1918-19 was very deadly; some 7,000 deaths, among all classes of the population, were reported.

II. POLITICAL HISTORY

CHRONOLOGICAL SUMMARY

c. 1857	German traders in Samoa.
1873	German traders in Bismarck Archipelago.
1878	Germany repudiates the annexation of New Britain.
1878-79	Germany acquires coaling stations in the Tonga Islands, the Marshall Islands, and Samoa.
1884	German Protectorate proclaimed over Bismarck Archipelago and Northern New Guinea.
	New Guinea Company founded.
1885	Anglo-German Agreement as to boundaries in New Guinea.
	Charter granted to New Guinea Company.
	German Protectorate proclaimed over Marshall Islands.
	Franco-German Agreement as to spheres of interest in the Pacific.
1886	Anglo-German Agreement as to spheres of interest in the Western Pacific.
	Anglo-German Declaration as to free trade in Western Pacific.
1887	Formation of Jaluit Company (Marshall Islands).
1889	Berlin Conference on the Samoan question.
1898	Guam (Mariana Islands) ceded to United States.
1899	Germany purchases Caroline, Mariana, and Palau Islands from Spain.
	Anglo-German Agreement as to partition of Samoa and the northern Solomon Islands.
	New Guinea Company surrenders administration of New Guinea to the German Government.
1914	Caroline and Marshall Islands occupied by Japan.

(1) PERIOD OF COLONIAL EXPANSION

German trade in the Pacific.—When, in 1884, Germany took that turn in her policy towards colonial expansion which the growth of her manufacturing industries and her ambition for a larger place in world politics seemed to render desirable, Africa and the Pacific Islands offered the most promising field. In the Pacific the way had been prepared for her by the activity of her traders in some of the island groups. About 1857 the Hamburg firm of Godeffroy had established itself at Apia in Samoa. As a British consular agent had been appointed in Samoa twelve years before and an American consular agent was also there, the Germans were not pioneers; but they acquired in time the trade supremacy and very considerable land claims. Apia became the base of the wider operations which Theodor Weber, the representative of Godeffroy, and German Consul-General in the Pacific, was planning for his country's interest. In the early seventies Godeffroy's agents were pioneering in the New Britain Islands (to which British missionaries also were opening the way), and soon had several factories and plantations in these islands, though so late as 1884 they were said to have none on the mainland of New Guinea.[1] About the same time they penetrated both the Caroline[2] and the Marshall Islands, seeking the trade in copra and pearls and recruiting labour for their plantations in Samoa. In Fiji also German interests were large, and there was a considerable German trade; and keen disappointment was felt in Germany when, in 1874, these islands were annexed by Great Britain.

But the German Government during these years showed no desire for territorial acquisitions. Bismarck was opposed to a colonial dominion, with expenses of administration and deficits falling on the Empire's Budget, and repudiated the annexation of New Britain, where in 1878 the commander of the war-ship *Ariadne* hoisted the German flag. The Reichstag took a similar view, and in 1880 refused financial backing to the German South Sea Trading Company, which was formed after the failure in 1879 of the firm of Godeffroy, and declared against the annexation of Samoa, then in the first stages of the convulsions caused by conflicting foreign influences. At the same time Bismarck was not indifferent to the interests of German merchants, and German warships were frequently sent to visit the Pacific Islands; and, when the project of a Panama Canal showed the importance of some of these groups on great routes of trade, the German Government entered into treaties with the natives for coaling stations at Neiafu in Vavau (Tonga Islands) (1876), at Jaluit in the Marshalls (1878), and at Saluafata in Samoa (1879).

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[1] C. 4290 (1884-5), p. 9.

[2] F. W. Christian, *The Caroline Islands*, p. xii.

New Guinea.—Some Germans date the beginning of their colonial movement from the annexation of Fiji by Great Britain; but it was not until the early eighties that that movement gained sufficient strength to overcome the reluctance of Bismarck and the indifference or opposition of the Reichstag. The new pressure of public opinion in colonial matters was shown by the emphasis with which Bismarck in 1883 was championing the claims of German planters in Fiji, who ultimately received £10,000.[1] In the summer of 1884 he promised protection to any establishments made by the newly-founded German New Guinea Company, which was organizing an expedition to Eastern New Guinea, whose annexation, as "the foundation stone of a colonial empire," had been urged in the German press in 1882.[2] For some time the Australian colonies had been justly apprehensive of the intentions of the German Government in regard to New Guinea and the neighbouring islands, and individually and collectively had urged on Great Britain the necessity of protecting their own and Imperial interests by the annexation of non-Dutch New Guinea. Finally in April 1883 the Government of Queensland went so far as to annex the territory on its own authority.

The story of these negotiations with the colonies is related in *British New Guinea* (No. 88 in this series, pp. 14-18), and need not be repeated here. The substance of the matter is that Great Britain, while not at all intending that Germany should annex any part of New Guinea, believed the fears of the Colonies to be unfounded, and hesitated to act, prolonging negotiations on the financial aspect of annexation. Conversations at Berlin in the summer of 1884 showed that the Germans intended to annex the New Britain Islands;[1] and the British Government then decided to proclaim a protectorate over at least the southern shore of non-Dutch New Guinea, leaving the question of the northern shore for further discussion with the German Government. But in November 1884, the New Guinea Company's expedition raised the German flag, not only in the New Britain Islands, but also at several points on the northern shore of non-Dutch New Guinea; and Bismarck, though he said "he had not precisely ordered" this to be done,[2] decided to accept the *fait accompli*, on the ground that the British Government had limited its protectorate to the southern shore, and that in any case British interests were not affected by a German protectorate over the northern. There had been a misunderstanding which, it seems, was not purely accidental, but the British Government, in view of the general political situation, and more particularly of the Egyptian difficulty, thought it wisest to recognise the German protectorate. In notes exchanged between Lord Granville and Count Münster in April 1885, the boundaries of the spheres of the two Powers in New Guinea were fixed as nearly as possible along the line of the watershed.[3]

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[1] Fitzmaurice, *Life of Lord Granville*, II, p. 338.

[2] J. D. Rogers, *Australasia*, p. 263, quoting *Allgemeine Zeitung*, Tübingen, November 27, 1882.

The Island Groups.—From the position thus obtained in New Guinea and the neighbouring islands the German Government hastened to assert its interests in the island groups to the north and east. In August 1885 the German flag was raised at Yap in the Caroline

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[1] A. and P., 1884-85, C. 4290.

[2] A. and P., 1884-85, C. 4290, p. 9.

[3] A. and P., 1884-85, C. 4441. See Appendix I.

Islands; but here Spain claimed the sovereignty[1]—a claim which the Pope, who mediated in the dispute, confirmed, though it was agreed that Germany should receive a coaling station and freedom of trade. In 1886 Great Britain also recognised Spanish sovereignty to the same extent as Germany had done and on the same terms in regard to trade.[2] In 1899, at the conclusion of the Spanish-American War, this group, together with the Palau and Mariana Islands (except Guam, which had been ceded in 1898 to the United States), was bought by the German Government from Spain for £837,500.

In October 1885 Lieutenant Röttger took possession of the Marshall Islands and of the Brown and Providence Islands, where the native chiefs accepted German protection. In the same month the German flag was raised at Choiseul in the Solomon Islands.[3] Thus in the course of a year Germany marked out, by the claim of protecting commercial interests or of occupying vacant lands, an extensive and compact sphere of interest in the western Pacific, consisting of the large and small islands and archipelagos that lay between the rich and little developed tropical dominions of the Dutch and the outskirts of the French and English Pacific possessions. By two important agreements, with France (December 1885) and with England (April 1886), the German sphere was defined and recognised.

Agreements with France and Britain.—In the Franco-German Agreement of 1885, France recognised Germany's new acquisitions; and Germany disclaimed interest in the New Hebrides, Raiatea, Tahiti, and the Society Islands, which, so far as regarded Germany, became a French sphere of interest, France promising to secure the rights of German subjects in these groups should she at any time annex them. In the Anglo-German Agreement[1] the Western Pacific was defined as that part of the Pacific Ocean lying between 15° north and 30° south latitude and 165° west and 130° east longitude; and a line of demarcation was drawn between the British and German spheres. Each Power agreed not to make acquisitions within the other's sphere as defined, nor to oppose the extension of the other's influence within its own sphere. The agreement was not to apply to Samoa, Tonga, or Savage Island, or to any possession in the hands of a third Power. It was further agreed not to establish penal settlements—the source of perpetual trouble to Australia—in the Western Pacific, and to maintain reciprocal freedom of trade, traffic, and industrial and commercial enterprise, and equal rights of acquiring property (save, of course, in self-governing colonies). The German sphere included the northern Solomon Islands (Bougainville, Choiseul, and Isabel) and the Carolines, as well as the territories over which Germany had already proclaimed her protection.[2]

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[1] The Caroline Islands were discovered by the Portuguese in the early sixteenth century, and subsequently claimed, though not effectively occupied, by the Spaniards.

[2] A. and P., 1886, C. 4613.

[3] This group of large islands, discovered by the Spaniards in 1568, lay almost unknown and unvisited by Europeans till the middle of the nineteenth century, when missionaries and labour-traders came. The Melanesian Mission was said to be the only redeeming feature in the intercourse of Europe with the islands, 1862-87. (H. B. Guppy, *The Solomon Islands*, p. 271.)

The later important Anglo-German Agreement of 1899 (see *infra*, Appendix V, pp. 92-3) modified the settlement of 1886 by transferring to Great Britain the northern Solomons (except Bougainville and Buka, which were retained by Germany), viz., Choiseul and Isabel and all other islands to the east and south-east of Bougainville, including the Lord Howe group.

Samoa.—The agreement of 1899 dealt with Samoa, where matters had taken a longer and more troubled course. Samoa, discovered by Roggeveen in 1722, had become of importance not only for its trade, but for its strategic position in the centre of the Southern Pacific on the great ocean routes and particularly in relation to New Zealand, a fact which that Colony repeatedly impressed on the Mother Country. Great Britain, Germany, and the United States all had interests in the islands; and in 1878-79, by treaty with the native Government, each acquired the right of establishing a coaling station—the United States at Pago-Pago, Germany at Saluafata, and Great Britain at some other place, not Apia. Furthermore, in view of the disturbed state of the islands and for the security of the interests of foreign residents, the Powers in 1879 induced the native Government to surrender its authority over the town, harbour, and neighbourhood of Apia, where they set up a Municipal Board,[1] with power to maintain order, issue licences, and levy rates, controlled by the consuls of the three Powers. But Samoa remained distracted by internal feuds and rival foreign influences. The native Government was very weak; the consuls of the Powers came frequently into conflict; and the settlement of difficulties was the more troublesome because there was at the time no cable communication with Europe. The annexation of the islands by one of the Powers seemed the only means by which peace and order could be secured. Over and over again the Samoans petitioned for British protection; and New Zealand, desiring to annex both Samoa and the Tonga Islands, offered to meet the cost; but Lord Derby refused, in view of the large German interests in the islands, the German trade and population being nearly twice the British.[2] On the other hand, neither the Samoans nor the other Powers desired Germany to annex this group, though Sir William Des Vœux, in a memorandum written for Lord Rosebery in 1886, argued in favour of this solution.[3]

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[1] A. and P., 1886, C. 4656; see also Appendix II.

[2] See Map issued with Agreement.

In 1887 a German war with Samoa brought matters to a crisis. A conference of the three interested

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[1] A. and P., 1881, C. 2748. *Cf. British Possessions in Oceania*, No. 144 of this series, pp. 30-32.

[2] A. and P., 1885, C. 4854, pp. 67-70, 78, 97.

[3] Des Vœux, *My Colonial Service*, II, p. 99

Powers met under Bismarck's chairmanship in Berlin, and in the agreement of June 14, 1889,[1] known as the Samoa Act, made a great effort to improve the condition of the islands. They declared Samoa neutral, independent, and free in its form of government, and assured to the subjects of the three Powers equality of rights in the islands. At the same time they tried to ensure peace, order, and better administration by setting up a Supreme Court of Justice and re-establishing the Municipal Board at Apia and by reserving the control of the Customs. This arrangement, which left Samoa nominally independent but really under tripartite government, lasted through ten uneasy years, until, in 1899, serious trouble again arose over the election of a new king—a fruitful source of trouble in Samoa. A Commission appointed by the Powers to consider the matter put a formal end to the independence of Samoa by recommending the partition of the islands.

By agreements made in November and December 1899,[2] Great Britain, in return for the surrender of German rights in the Tonga Islands, including Vavau, and in Savage Island, as well as the German share of the Solomon Group (including the Howe Islands) east and south-east of Bougainville and Buka (which were to continue to belong to Germany), renounced in favour of Germany and the United States all her rights in the Samoan Islands, of which Upolu and Savaii were given to Germany, and Tutuila and all the other islands east of 171° W. long. to the United States. It was further agreed that the three Powers should stand on an equal footing commercially in the islands, and that the Declaration of 1886 respecting freedom of commerce in the Western Pacific should apply to all the islands mentioned in the Convention.

These acquisitions completed the tale of German possessions in the Pacific, which, in 1914, consisted of two groups: (1) German New Guinea, including Kaiser Wilhelmsland (as the annexed north-eastern portion of the island of New Guinea was named), the Bismarck Archipelago, Bougainville and Buka in the Solomons, the East and West Caroline Islands, with the Palau and Mariana (or Ladrone) Islands, excepting Guam, and the Marshall Islands; and (2) the Samoan Islands, Savaii and Upolu—a total area estimated at about 94,000 square miles, with a white population of about 2,000, and a native population estimated at more than 892,000.

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[1] A. and P., 1890, C. 5911. See Appendix IV.

[2] A. and P., 1900, Cd. 38 and 39. See Appendices V and VI.

(2) The Chartered Companies

German colonial policy in its inception under the guidance of Bismarck took the form of "diplomatic guardianship," that is to say, the protection by the State of business interests created by German merchants. The Imperialistic idea of a field of employment for the educated talent of the Empire was a later growth. Hence, when the problem of organizing government in the new colonial possessions was first broached, Bismarck's idea was to administer them through chartered companies on the model of some of the English dependencies, thus leaving to the merchants the work of material development. This method commended itself to him not only because it did not commit the State so directly, but also on the ground of economy.

The New Guinea Company.—By Imperial charter of May 1885 sovereign rights over New Guinea and the Bismarck Archipelago were conferred on the newly-founded New Guinea Company; and in December 1886 the German Solomon Islands were added to its sphere. The company was to establish and maintain government and judicial organization, and in return received all regalian rights under the supervision of the German Government. Its path was not a smooth one; neither its administration nor its attempts at economic development were successful; and in 1889 the Imperial Government stepped in and took over the collection of taxes and duties, the Company meeting the cost. Three years later the Company resumed control and administered the possessions in question until 1899, when, convinced that the task was beyond its strength, it surrendered its sovereign rights for four million marks and certain other concessions, and became merely a privileged trading Company. Throughout it had lacked capital, prestige, and moral support. It had had misfortunes; it lost heavily in trying to arrange adequate shipping communications; and an epidemic in 1891 carried off half its officials. But its administration was marred by excessive centralization in the Berlin management; its service was unpopular; and incomplete cadres and continual changes in the staff produced a fatal instability in the local government, which may have been one reason for its failure to get into touch with the natives. Unsuccessful as it was, it must be remembered that it held a vast territory for Germany while opinion at home developed in favour of a more active colonial policy.

On the economic side the Company carried out some of the exploration and experiment in the choice of places for settlements and plantations, which are the necessary preliminary work in colonization. It founded a number of stations—Stephansort (1888), Friedrich Wilhelmshafen, its capital (1891), and Berlinhafen (1894). But its economic enterprises were often costly and attended with little success; and, while failing itself, it impeded private effort. In the Bismarck Archipelago, where the first German plantation had been established in 1882, better administration produced better relations with the natives, and a firmer foundation was laid for subsequent expansion. Under the direct administration of the State, New Guinea has progressed slowly through the inevitable initial difficulties. Excessive government control has rather stifled individual effort; but the number of plantations, the volume of trade, and the European population have been increasing. Though gold has been found in the Bismarck Mountains, the mineral discoveries have been unimportant. Wars like those which marred the history of German colonization in Africa did not occur, but the Government cannot be said to have been very successful in its dealings with the natives or to have overcome the difficulties of inducing them to take part in economic development. Nevertheless, its activity in exploration and scientific investigation was a valuable preparation for the future government and progress of the territories.

Of the European population nearly a quarter are missionaries, in whose hands the education of the native lies, a tenth are Government officials, and traders, planters, and artisans make up about a third.

The Marshall Islands.—In the Marshall Islands also Company government was established. In December 1887 the two German firms that controlled the trade of the island became the Jaluit Company, to which financial control was delegated in 1888. It was arranged that Imperial officials should carry on the administration, the Company defraying the cost and receiving in return exclusive authority and the monopoly of the pearl fisheries and of collecting guano. A very simple administration was set up, with a Commissioner at the head, who was required to act with the advice of the Company. The arrangements worked well; there was no trouble with the natives; and the Company, confining itself chiefly to the copra trade, made good profits.

III. SOCIAL AND POLITICAL CONDITIONS

Administration.—In 1899, when the Carolines and part of Samoa were annexed and the New Guinea Company surrendered its sovereignty, the Imperial Government undertook the direct administration of all its Pacific possessions, save the Marshall Islands, where the Jaluit Company ruled as before until 1906. For administrative purposes they were divided into Samoa and New Guinea, which included all the German possessions in the Western Pacific. The system of government was simple and authoritative. The Governor, appointed by the Emperor, had wide powers, unrestricted by local legislatures or councils. In New Guinea Old Protectorate (viz., the Bismarck Archipelago, Solomon Islands, and Kaiser Wilhelmsland), he was assisted by two superior judges; and the territories were divided into seven districts, Rabaul, Käwieng, Namatanai, Kieta, Friedrich Wilhelmshafen, Eitape, and Morobe, administered by local magistrates. Order was maintained by a native police, commanded by German officers. The seat of Government was at Rabaul, whither it was transferred from Herbertshöhe in 1908-10. In the New Guinea island possessions—viz., the Caroline and Marshall Islands—there were deputy commissioners acting under the Governor at Rabaul. The seat of government for the Eastern Carolines was at Ponape; for the Western, with the Palau and Mariana Islands, at Yap; and for the Marshall Islands at Jabor. Samoa was divided into two administrative districts, Upolu and Savaii. The Governor resided at Apia, in Upolu, and was assisted by an Imperial judge. There was a native High Chief, and a native Council; and here, as also in New Guinea, some use was made of native chiefs in the administration.

Colonial Revenue.—This came mainly from Customs; and of the Customs revenue the greater part was derived from alcohol. Imperial subventions were necessary to enable the colonies to pay their way, though their financial position was improving with the growth of trade. Constitutionally the colonies were not integral parts of the German Empire; they did not belong to the Customs Union, and were not subject to general laws regulating taxation. Until 1893 they were charged import duties like foreign countries, but from that time they enjoyed most-favoured-nation treatment. They were at first administered by the Foreign Office, in which in 1890 a Colonial Department was established under a Colonial Director; in 1902 an unpaid advisory council of about forty persons was formed. These arrangements did not work well, and in 1907 were superseded by the creation of a Colonial Office with large independent powers.

The Native Question.—The government of the Pacific Island groups does not present so large a problem as that of most other tropical and sub-tropical dependencies. They are not populous; and the material civilization and political organization of most of the peoples are of a primitive type. At the same time it is a problem that has been complicated by many difficulties—long distances and inadequate means of communication, inadequate funds, the variety of the native peoples, imperfect knowledge of their ideas and ways of life, the rivalries of the greater Powers, and the pressure of commercial interests in days when the economic exploitation of the Tropics is being pushed rapidly forward. Some of these cannot be removed; but stress may be laid on the importance of encouraging and aiding systematic and scientific ethnological investigation, since without such knowledge wise and tactful government is impossible. The acquisition of land by Europeans, the recruiting and importation of indentured labour, taxation, education, and political rights are all matters in which the interests of the natives are closely concerned. The labour question is the most important. Without the labour of the native the European cannot develop tropical countries. But in the changing economic life of their country there is danger that the natives may be reduced to economic servitude and in losing their independence may forfeit also their chances of material and moral progress. The European Powers have now considerable experience in the government of the Pacific Islands, and in some parts the interests of the natives have received substantial protection. By an exchange of ideas, the Powers might secure by agreement the adoption of some general principles which would diminish the abuses that arise where civilized and primitive peoples meet.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) INTERNAL

(a) *Roads*

THE internal road systems of the former German Pacific Islands are very rudimentary. Since traffic between one island and another must of necessity go by sea, it is not surprising that intercourse between different parts of the same island should be carried on more by water than by road. This comes about the more easily because the chief source of wealth in nearly all the islands is the coconut palm, which thrives best in the sandy soil and sea air of the coast districts. Moreover, the inland regions of the larger islands are almost unknown to Europeans, and, except for difficult native tracks, are wholly lacking in means of communication. Nevertheless, the Germans effected a very considerable improvement in the land communications of a number of islands.

Melanesia[1] (Kaiser Wilhelmsland, the Bismarck Archipelago, and Solomon Islands).

Kaiser Wilhelmsland has about 190 miles of carriage roads and 310 miles of bridle roads. Roadmaking in this region has been retarded by the need of frequent bridges; but roads have been made in the neighbourhood of Friedrich Wilhelmshafen and also round Eitape, Morobe, and Adolfhafen.

The Bismarck Archipelago and the Solomon Islands have several roads of recent construction. Neu

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[1] The headings *Melanesia* and *Micronesia* throughout Part IV refer only to those parts of Melanesia and Micronesia formerly in the possession of Germany.

Hannover is encircled by a coast road. In Neu Mecklenburg about 112 miles of road suitable for heavy traffic have been made along the north-east coast from Käwieng as far as Panakondo; and from Namatanai a road crosses the island at its narrowest point. There are roads round both Fischer Island and Gardner Island. In Neu Pommern the Gazelle Peninsula has many bridle and carriage roads, including a good new road between Rabaul and Herbertshöhe. The island of Buka, the most northerly of the Solomons, has a complete coast road. In Bougainville a road was being made by the Germans on the north-east coast from a point a few miles south of Kieta as far as Cape le Gras, but in 1912 it was still interrupted in places. These roads, and particularly those in the Solomon Islands, are for the most part roughly laid, having been made by natives with only occasional European supervision.

Micronesia (The Caroline, Palau, Marshall and Mariana Islands).

The Palau Islands have long possessed a number of good stone-paved roads leading from the villages to the landing-stages.

In 1914 Yap (West Carolines) had a network of excellent roads constructed by natives under German supervision at a very low cost. Their total length was nearly 40 miles. In Ponape (East Carolines) road-building was being pressed forward vigorously.

Garapan, in Saipan (Mariana Islands), is the starting-point of two roads, one leading south-east to Laulau Bay and the other to the fertile north-east coast.

Samoa.

It is, however, in Samoa that most road-making has been done. A post-road runs along the entire north coast of Upolu, and a bridle-road along a considerable part of the south coast, while another bridle-road runs across the western half of the island from Leulumoega to Lefaga. On Savaii a post-road follows the coast from Salaelua in the south-west to Cape Matautu, the most northerly point of the island.

(b) *Rivers and Canals*

On account of the lack of inland roads in the former German Pacific Islands, navigable rivers, where they exist, are exceptionally valuable. Such rivers, however, are to be found only in the larger islands of Melanesia. By far the most important is the Kaiserin Augusta river in Kaiser Wilhelmsland. It has not been fully explored, but was found in September (not the wettest month) to be about 270 yards wide and 12 ft. deep at 141° 51′ east longitude; at 143° east longitude it is between 300 and 400 yards wide; and in its lower reaches it has a current of 3½ to 4½ miles an hour. As it approaches the sea its tendency to divide and form islands, sandbanks, and lagoons reduces the depth to under 30 ft., but there is no actual sandbar. It is navigable for 150 miles by motor-boat at all times of the year, but in the rainy season flat-bottomed paddle-steamers can ascend for more than 400 miles. The second river of Kaiser Wilhelmsland in point of size is the Ramu, or Ottilien, which is navigable by steamers at least as far as 5° 6′ south latitude, and was expected by the Germans to prove of great value as a waterway. The Markham river, also in Kaiser Wilhelmsland, is navigable for 40 or 50 miles. The Gogol river also is said to be navigable. In their lower reaches, unfortunately, the longer rivers form marshes which render the adjoining land impassable for traffic.

In Neu Mecklenburg the little rivers Senepas and Koko are navigable for boats, as are also some short rivers in Neu Hannover. Most of the streams in the Bismarck Archipelago, however, are too shallow and too rapid for navigation.

(c) *Railways*

There are no railways in the ordinary sense in the former German Possessions. In Kaiser Wilhelmsland there are two short field railways worked by oxen, one of which connects the plantation of Yomba with the port of Friedrich Wilhelmshafen, while the other links up Erimahafen, Bogadjim, and Stephansort.

In Nauru a cable railway has been constructed for the transport of phosphate.

The construction of a tramway or light railway from Apia to the west coast of Upolu was planned by the Germans.

(d) *Posts and Telegraphs*

Under the German domination the post-stations for the mails from abroad coincided with the places of call of the steamships. The chief post-stations were Jabor (Jaluit, Marshall Islands), Kusaie, Ponape, Truk (East Carolines), Saipan (Mariana Islands), Yap (West Carolines), Koror, Angaur (Palau Islands), Eitape, Friedrich Wilhelmshafen, Stephansort, Finschhafen (Kaiser Wilhelmsland), Rabaul, Herbertshöhe (Neu Pommern), Käwieng, Namatanai (Neu Mecklenburg), Kieta (Bougainville), Nauru, and Apia.

The European mails for Samoa take 41 days *via* Canada and 47 days *viâ* Sydney. In Apia there was an imperial post-office, which sent out letters twice every three weeks along the whole of the north coast of Upolu and along the coasts of Savaii as far as Fagamalo in the north and Salaelua in the south-west. In other districts of German Samoa deliveries were made by rowing and sailing boats.

In 1914 the New Guinea province had 105 miles of telegraph and 73 of telephone lines. Posts and telegraphs were managed from Rabaul, where there was a field railway from the harbour to the post-office. Rabaul and Herbertshöhe had telephonic communication with each other, as well as local systems of their own.

In Samoa the telegraph and telephone lines had each a total length of 105 miles.

(2) EXTERNAL

(a) *Ports and Harbours*

Melanesia.

Rabaul, on Blanche Bay in Neu Pommern, is the best port of the former German Pacific possessions. In 1909, partly for hygienic reasons and partly on account of its superior advantages as a harbour, it replaced Herbertshöhe, also on Blanche Bay, as the seat of Government for all the German Pacific possessions except Samoa. Rabaul port consists of two natural harbours, Matupihafen and Simpsonhafen, which lie one on each side of Bridges Point. Simpsonhafen, on which the town of Rabaul is situated, has the better shelter, and offers about 3½ square miles of anchorage. At Rabaul town there is a pier 300 yards long, 143 yards of which are available for berthing ships, the depth of water alongside varying from 39 to 24 feet—sufficient, that is to say, for the largest vessels. Matupihafen has only a very short pier, but Malagunan, on the western shore of Simpsonhafen, has a pier which is said to be suitable for large ships. Coal up to about 2,000 tons was normally available at both Simpsonhafen and Matupihafen, and both have slips for trading schooners. Rabaul is 2,700 miles distant from Hongkong, 1,800 from Sydney, and 1,400 from Brisbane. Although its population is under 4,000, it is the headquarters of several important trading firms. There was a small German savings-bank in the town, and a branch of the Commonwealth Bank has been established there since 1914.

The Germans erected a lighthouse in Blanche Bay, and piers at several points on its coast.

Käwieng, in Neu Mecklenburg, has a commodious and sheltered harbour.

In Kaiser Wilhelmsland the chief port and the seat of the leading trading firms is *Friedrich Wilhelmshafen*, which affords accommodation for all kinds of vessels, and has a coaling station and wharf. There are lighthouses at the entrance of the harbours. Of the other ports, taken in order from north to south, *Eitape*, which has a coaling-station and wharf, and is the chief collecting centre for the Berlin Bay district, offers fairly good shelter, though the handling of cargo is often impeded by a swell; *Alexishafen* and *Konstantinhafen* are both well sheltered; *Finschhafen* has landlocked anchorage for small vessels and more exposed anchorage for larger ones; and *Langemak Bay* affords commodious anchorage in deep water. Of the less important harbours more cannot be said than that they are fit for schooners and small steamers in certain winds.

Micronesia.

In the Palau group, *Malakal Harbour* has the best anchorage, but the entrance is narrow, and not very deep. *Koror Harbour* is reported to be good and available for big ships. There is a wharf with some 27 feet of water alongside. The roads are useful for sailing vessels, and are fairly well sheltered.

Tomilhafen, the best harbour in the Western Carolines, is safe and commodious. On its western shore is situated Yap, the administrative capital of the group. Tomilhafen was formerly accessible only by a natural gap in the barrier reef south-east of Yap, but it can now be entered from the north, for the Germans cut a canal through the narrow isthmus connecting the islands of Yap and Tomil. At Tarang Island, in the harbour, there is a coaling-station, which has a stone wharf with 20 feet of water alongside.

In the Eastern Carolines, *Ponape*, on the island of the same name, has a well-sheltered harbour suitable for large vessels. It could be much improved by the removal of patches of coral. Other small harbours in Ponape Island are *Ronkiti* and *Lot*. *Chabrolhafen*, in the island of Kusaie, is roomy and well protected. The *Royalist Lagoon* has no well-sheltered harbour, but large barques are often loaded there.

Tanapag Harbour, off the north-west of Saipan, in the Mariana Islands, is safe and well protected, but is difficult of approach, the entrance channel being narrow, and obstructed by rocks. The harbour is suitable only for small craft, and has no coaling facilities. *Sosanjaya Bay* adjoins Tanapag Harbour; it is sheltered from northerly winds, but the anchorage is poor.

The harbour of *Jaluit*, on Jaluit Island in the Marshall group, can take large vessels, but is not completely sheltered. At Jabor, on its eastern shore, there is a short pier. Jabor is a thriving town and the seat of administration for the Marshall Islands. The *Lagoon of Wotje* or *Romanzov Atoll* also takes large vessels, but is not well protected.

Samoa.

Apia in Upolu, the capital of Samoa, has a commodious harbour, which is, however, exposed on the north and is a dangerous anchorage in the hurricane season. It has a short wharf and leading lights. About 1,000 tons of coal are normally available, but coaling is sometimes impeded by a heavy sea. The Germans estimated that it would cost £2,000,000 to make Apia Harbour a safe one, and decided that the undertaking would not pay, since Apia does not lie on any of the important trade routes which the Panama Canal was expected to bring into use. Apia has, moreover, to compete with Pago-Pago in Tutuila, one of the best Pacific harbours, which is only 70 or 80 miles away.

The harbour of *Saluafata*, also in Upolu, offers better protection than that of Apia, but is considerably smaller, being only about 1,000 yards square. It is deep enough to accommodate the largest vessels.

Salaelua, in Savaii, is the best harbour in the island, but it has little protection and poor holding ground.

Many South Sea Islands with good harbours are avoided by shipping because they are difficult to approach. Sometimes a heavy swell makes landing dangerous, sometimes a reef opposes an almost unbroken barrier to incoming vessels. When the island itself is a coral atoll it is usually found that the deep passage into the lagoon is so placed that entrance from the open sea must be effected against the prevailing wind, while the inner end of the channel is partially blocked by an islet deposited by the outrushing water. The advantages of lagoons for anchorage are thus seriously discounted. In Kaiser Wilhelmsland landing is seldom difficult, as some island, reef, or cape nearly always affords shelter from the swell. Sometimes, both in Kaiser Wilhelmsland and in the Bismarck Archipelago (especially in Neu Hannover), mangrove swamps prevent landing. The smaller islands of Micronesia are better protected from swell than the larger, for they are more completely surrounded by coral reefs. The Caroline and the Marshall Islands are, as a rule, low and well sheltered by reefs, although entrance to the lagoons is in many places difficult. The Mariana Islands, on the other hand, rise steeply from the sea, and heavy surf impedes and even prevents landing except on the southern islands, which have reefs. The Samoan coasts are moderately protected by reefs, but entrances for large vessels are comparatively few.

(*b*) *Nature and Volume of Trade*

Some idea of the relative commercial importance of certain ports and islands of the former German Possessions may be obtained from the following statistics of the import duties levied at them in 1913 :—

	£
Rabaul	4,200
Friedrich Wilhelmshafen	1,300
Nauru	700
Jaluit	550
Saipan	275
Yap	250
Kieta	200
Ponape	200
Angaur	200
Palau Islands (excluding Angaur) ...	150
Eitape	150
Käwieng	75

The number and tonnage of the vessels visiting the German Pacific Possessions during 1912 are shown in the following table:—

——	German Melanesia.	German Micronesia.	Samoa.	Totals
Number of vessels ..	634	346	121	1,101
Tonnage	502,606	442,923	84,300	1,029,829
Number of steamers ..	470	213	86	769
Tonnage of steamers ..	396,033	428,083	77,240	901,356
Number of German steamers	468	138	..	606
Tonnage of German steamers	390,510	209,502	..	600,012
British steamers	..	..	84	..
American steamers ..	..	..	2	..

In 1908 the totals for the three groups were as follows:—

——	German Melanesia.	German Micronesia.	Samoa.	Totals.
Number of vessels ..	666	58[1]	114	838
Tonnage	514,161	187,127	117,586	818,874

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[1] The 1908 figures for Jaluit not being available, those for 1907 have been included in these totals.

The increase in the totals for the whole of German Oceania between 1908 and 1912 was almost wholly due to the increasing export of phosphate from Nauru and Angaur.

(c) *Shipping Lines*

German.—Before the war the Norddeutscher Lloyd ran large steamers monthly from Hongkong to Sydney, calling at Manila, Yap, Eitape, Friedrich Wilhelmshafen, Rabaul, and Herbertshöhe. It also had a monthly service from Singapore to the chief ports of Kaiser Wilhelmsland and the Bismarck Archipelago. For these services the company received a subsidy of £35,000 a year from the German Government, which in 1914 voted £15,750 as an additional subsidy in order that the service from Singapore might be extended to Apia. The Norddeutscher Lloyd also ran smaller vessels for the local traffic between the ports of Kaiser Wilhelmsland and the Bismarck group.

From 1898 to 1907 nearly all the exports and imports of Kaiser Wilhelmsland and the Bismarck Archipelago were carried by Burns, Philp & Co., the well-known Australian shipping firm, who successfully resisted the rivalry of the Jaluit Gesellschaft. The Norddeutscher Lloyd, however, proved a more formidable competitor, offering the settlers very favourable terms for shipments to Antwerp, Hamburg, and Bremen, but not to British ports, on condition that they signed a contract to ship exclusively in the company's vessels for five years. Low through rates were quoted for consignments to the ports named, and the company's steamers ran in connection with the regular German services between Sydney or Hongkong and Europe, so that settlers who accepted the company's terms saved both money and time. Neither Burns, Philp & Co. nor other lines whose interests were threatened seem to have made any effort to meet the Germans with their own weapons. It is, indeed, improbable that they could have ventured to do so without financial support from their respective Govern ments. In consequence, the charges on copra consigned from German New Guinea to Western Europe never fell below 64*s.* a ton if it was shipped by an Australian vessel, whereas the through rate of the Norddeutscher Lloyd was only 53*s.* 6*d.* a ton. In such circumstances it was inevitable that Burns, Philp & Co. should withdraw after a short struggle.

The main object of the local service established by the German company between the ports of Kaiser Wilhelmsland and the Bismarck Archipelago is said to have been the collection of copra, which was carried at very low rates. Many exporting firms were thereby enabled to dispense with the schooners they had previously been compelled to employ. It appears that this service of the Norddeutscher Lloyd was run at a loss, but was maintained in order to provide cargo for the company's big steamers, to secure the products of the region for the German market, and to prevent the intrusion of Australian firms. Altogether the policy and methods of the Norddeutscher Lloyd in German New Guinea and the neighbouring islands afford an excellent illustration of the jealous exclusiveness of Germany's colonial policy.

The Jaluit Gesellschaft ran three steamers a year from its headquarters at Jabor to Hongkong and back. A very devious route was followed, the vessels calling at Kusaie, Ponape, and Truk (East Carolines), Saipan (Marianas), Yap (West Carolines), and Koror (Palau Islands). The same company had regular sailings from Jabor to Sydney *via* Nauru and Rabaul, and maintained a monthly mail service between Ponape, Yap, and Manila. It also had a local service among the Marshall Islands, the more important being visited five times a year.

In 1914 a German steamer began to run regularly between Apia and Pago-Pago, in Tutuila.

Australasian.—The Union Steamship Co. of New Zealand runs steamers between Sydney and Auckland (N.Z.), calling at intermediate ports in Fiji, Samoa, Vavau, and Tonga. The steamers start once a month from each end, so that intermediate ports receive two visits monthly.

Burns, Philp & Co. have a three-monthly service between Sydney and the Marshall Isles; and Nauru is visited once a quarter by the firm's steamers between Sydney and the Gilbert Islands. The company also runs a steamer every three weeks from Sydney to Papua and Kaiser Wilhelmsland, and has a monthly service to Kaiser Wilhelmsland, the Bismarck Archipelago, and the Solomon Islands.

Japanese.—A Japanese line, the Nanyo Boeri Kahushiki Kaisha, now runs from Yokosuka to the Marshalls and Yap. Other Japanese services have been established in the interests of the Palau, Mariana, Caroline, and Marshall Islands, which have latterly been under Japanese administration.

American.—The Oceanic Steamship Co. runs a motor vessel regularly between Apia and Pago-Pago, in Tutuila, which is visited by the company's trans-Pacific steamers.

Only regular services are mentioned above, but the islands are of course visited by great numbers of miscellaneous craft, from large steamers to sailing vessels of a few tons burthen. No attempt to classify them can be made here.

(*d*) *Cable and Wireless Communication*

Yap is connected by cable with Menado, with Shanghai, and, *viâ* Guam and Midway Island, with Honolulu and San Francisco. The cables were owned by the Deutsche-Niederländische Telegraphen-Gesellschaft of Cologne.

A cable from Yap to Rabaul was projected, but wireless telegraphy, being cheaper, will doubtless supplant minor cable installations in the Pacific.

There were high-power wireless stations at Rabaul, Apia, and Yap, and low-power stations at Kieta, Käwieng, Nauru, and Angaur. The stations at Yap and Angaur were destroyed in August 1914.

Rabaul can communicate with Apia (2,500 miles) and Fiji (2,060 miles). Plans existed for extending the range of the naval wireless station at Tsingtau, so that it might communicate with Yap (2,280 miles).

The construction and management of the whole German wireless system in the Pacific, except the station at Angaur, were in the hands of the German Südseetelefunken Kompagnie, founded at Bremen in 1912. It received a State subsidy, and had the exclusive right of establishing new stations in German Oceania.

The low-power station at Angaur communicating with Yap belonged to the Deutsche Südseephosphat-Gesellschaft.

(B) INDUSTRY

(1) LABOUR

(a) *Labour Supply*

One of the greatest obstacles to the economic development of the South Sea Islands is the shortage of labour. It is true that this is less serious in the former German possessions than elsewhere, as it is believed that they contain about half the total population of Oceania; and those which offer most scope for expansion—namely, Kaiser Wilhelmsland, the Bismarck Archipelago, and the Solomon Islands—happen also to possess the largest recruiting fields. Nevertheless, the need for more labour is acutely felt, and is likely to become greater as the former German colonies are further exploited.

In Melanesia the difficulty of securing labour arises from the persistent and sometimes active hostility of the natives to the European settlers. In the Bismarck Archipelago this has been exacerbated by the forcible recruiting of the natives in past years for labour in Queensland, Samoa, and other Polynesian Islands. The memory of this scandalous traffic is still lively, although in 1888 the Germans virtually prohibited the export of labour from the Archipelago, making an exception only in favour of the Deutsche Handels- und Plantagen-Gesellschaft in Samoa. Up to 1914 there was no sign of improvement in the relations between natives and Europeans; indeed, in the last years before the late war the inhabitants of Kaiser Wilhelmsland, when willing to work at all, showed an increasing preference for employment on native plantations.

The German Government tried various means for solving the difficulty. They sought to check the wasteful use of the labour supply, not only by restricting the export of labour from the Bismarck Archipelago, but also by limiting to 200 the number of indentured labourers that might be employed by any single undertaking in Kaiser Wilhelmsland, though here an exception was made in the interests of the Neu-Guinea Kompagnie. Labour bureaux, too, were established; but these failed to satisfy the needs of the settlers, and seem to have been badly organized, for the backward state of the German Solomons is said to be largely due to ill-considered recruiting of their inhabitants for work elsewhere. Another device was the poll tax, which was imposed for the express purpose of compelling the natives to work in order to pay it. The effect, however, was disappointing, as the natives merely put more energy into the cultivation of their own land, or accepted employment from native planters for just long enough to earn the necessary money.

Even if the inhabitants of what was formerly German Melanesia become more friendly and industrious, their lack of intelligence will preclude their employment on any but the most mechanical tasks. Foreign overseers will always be needed. The cost of production will thus be higher than in many Pacific islands, and the development of these regions is therefore likely to be slow.

In Micronesia the demand for labour has been kept down by the limited scope for industry. Nevertheless, the supply is inadequate in both the

Marianas and the Marshalls. In 1893 the Germans prohibited the recruiting of natives of the Marshalls for work in other islands, and in this group they furthermore instituted compulsory labour — twelve days a year for married men and twenty for bachelors, while coloured immigrants without means of support had to accept work at the local rates.

The natives of the Carolines reach a fairly high level of intelligence, and are capable of acting as overseers. They are also more civilized and more friendly to Europeans than the inhabitants of Melanesia. They have been employed with success at the phosphate workings on Nauru and Angaur. They are not, however, wholly subservient, and in 1912 a new law imposing fifteen days' compulsory work a year excited active discontent, and the deportation of some of the ringleaders to Nauru was followed by an insurrection in Ponape. It is significant that two years later the British Phosphate Company considered it necessary to obtain permission to engage Chinese labour for work at Nauru.

Of all the former German possessions in the Pacific, Samoa has found the labour problem most troublesome. For some time the development of the German islands in that group proceeded rapidly, and about the beginning of the century several new companies were formed for the exploitation of their resources. But the native population, reduced as it had been by civil wars, was increasing but slowly; Melanesian labour might not be recruited, except by the Deutsche Handels- und Plantagen-Gesellschaft; and Malay labour was found unprofitable. Accordingly, at the suggestion of one of the new companies, it was decided to import Chinese. A number were recruited; they entered into three-year contracts, but were not allowed to acquire land or engage in trade. In 1907 the Chinese Government complained of the treatment of the coolies, and demanded that they should be entitled to the same rights as Germans. The German authorities refused, but in 1910 the want of labour forced them to reopen negotiations and to give way on certain points. In 1912 more Chinese came, but not in sufficient numbers. Taking full advantage of the situation, China next asked for the removal of the regulation forbidding Chinese to buy land or engage in trade; and, after an abortive attempt to secure Javanese labour, the German Government was again constrained to make concessions. Some 4,000 coolies were then sent to Samoa, but the wages agreed upon (2*s.* a day) made it impossible to employ them profitably except on copra or cacao plantations. Since 1914 many of the Chinese labourers have been repatriated. The Samoan planters are, therefore, in great difficulties, especially as a large number of natives (see above, p. 14) recently died of influenza.

Whether the natives are numerous or few, friendly or hostile, civilized or barbarous, it is everywhere difficult to induce them to work. For one thing, they lack the physique for regular labour. The climate, also, is enervating. And, from their standpoint, there is little reason for exertion. They can easily catch plenty of fish; many vegetable foods grow wild, and others, such as taro and yams, can be cultivated with little trouble. Even if they earn wages there are few things they want to buy with them.

It is said that the South Sea Islanders work best away from home, and contract-labour is therefore favoured by many Europeans. The contract period, however, should not be longer than a year or eighteen months. A desire to see the world and to bring back presents will sometimes lead young men to accept contracts; and in Samoa, where the natives are zealous Christians, an additional motive is the need of money for the churches, though this is counterbalanced to some extent by the communal organization of native society, under which a worker's earnings go to his tribe. It is a drawback of the contract system that the absence of the young men from home reduces the birth-rate; but opinions differ as to the advisability of allowing their wives and families to accompany them.

(*b*) *Labour Conditions*

For ordinary native labour in Melanesia and Micronesia the German Government at Rabaul fixed a minimum wage of 4*s*. a month, and advised that not more than 6*s*. a month should be given.

For indentured Melanesian labour about 15*s*. a month was paid. Chinese contract labourers in Samoa received £2 to £3 a month.

Immigrant labourers under contract were housed, fed, clothed, and provided with tobacco, besides receiving an agreed wage, either in money or in goods, one-third being paid during the period of employment and two-thirds at the end. The minimum rations fixed by the German authorities for these workers were much inferior to those which had to be supplied in British colonies; they consisted chiefly of rice, and were inadequate in both quality and quantity. In Kaiser Wilhelmsland and the adjacent islands the supervision of indentured labourers is said to have been inefficient, but in general most careful measures were taken to prevent disease. Notwithstanding these, the Chinese labourers in Samoa suffered much from beri-beri. Their interests were in charge of a Chinese consul at Apia, and complaints of ill-treatment when they were first employed were investigated by a commission appointed by the Chinese Government. The charges made were found to be partly true, and reforms were subsequently adopted.

(2) AGRICULTURE

Except in those islands where phosphate deposits are worked, agriculture is the staple industry of the former German Pacific possessions. In recent years it has made steady progress, owing partly to the extension of European plantations, and partly to the high prices paid for native-grown copra. In 1913, out of the

60,000,000 acres of the German Pacific Islands as a whole, 107,000 acres were cultivated under European direction. This proportion may seem very small, but it must be remembered that most of the former German possessions are largely covered by primeval forest, and that the clearing of the land for plantations is a slow and arduous task. No statistics regarding native plantations are available, but it appears that in Kaiser Wilhelmsland, where the scope for expansion was greatest, they were growing more rapidly than European plantations.

That cultivation by Europeans was increasing under German rule is clear from the following figures, which are given by the *Jahrbuch über die deutschen Kolonien*:—

Year.	Melanesian and Micronesian Possessions.			Samoa.		
	Acres.	Plantations.	Coloured Labourers.	Acres.	Plantations.	Coloured Labourers.
1911 .	70,080	63	11,144	20,757	135	1,950
1912 ..	70,412	67	13,742	20,882	133	2,053
1913 ..	80,560	111	15,116	26,755	141	2,118

(*a*) *Products of Commercial Value*

General.—By far the most important agricultural product of the former German Possessions is the coco-palm. In 1913, 80 per cent. of the area under cultivation by Europeans was devoted to it. The palm thrives best in sea air and sandy soil, so that most of the former German Possessions are admirably suited to it. If only it is kept clean it requires little attention, and as the natives have great experience and skill in its cultivation it is more profitable to employ them on coco-palm plantations than on any others. The palm is still widely cultivated by the natives themselves.

The chief disadvantage of coco-palm cultivation is that the palm does not bear fruit until at least seven years after it has been planted. Attempts to find a suitable "catch-crop" to grow in conjunction with it have not been very successful, experiments with maize, sugar-cane, and arrowroot having yielded disappointing results. Nevertheless, the industry has of late been very profitable, for prices have steadily risen, and the preparation of copra has been facilitated by the extended use of drying kilns. It is generally reckoned that about 2½ acres of land are required to grow 6,000 nuts, which on an average yield one ton of copra. A German authority, writing in 1917, estimated that by 1926 the German Pacific Islands should be able to supply 90,000 tons per annum, or, as he put it, one-third of the total amount required by Germany.

The best copra produced in the former German Islands comes from the western islands. Here the native growers sell the whole nut to traders, who themselves prepare the copra. It is a defect of this arrangement that the cultivators lose the shells, which make a good manure for coco-palm plantations. In Kaiser Wilhelmsland and the Bismarck Archipelago a good deal of copra is prepared by the natives, but its quality is apt to suffer through the use of green nuts, although this was strictly forbidden by the Germans. There is often much waste in native plantations, as certain trees are regarded as *tabu*, and may not be touched.

After the coconut, cacao, rubber, and bananas are the most important products of plantations belonging to Europeans, but their cultivation is less widespread and has been less uniformly successful. Further particulars will be found below.

A number of plants yielding useful foods, such as taro, yams, bread-fruit, sugar-cane, are highly prized by the natives, who cultivate them almost everywhere. They are not, however, turned to commercial account by Europeans.

The raising of live-stock on a large scale is but rarely attempted in the islands, and few animals are kept. Good pasture is scarce. It has recently been found, however, that if allowed to graze in coco-palm plantations cattle will keep down the weeds so efficiently that the need for labour is greatly reduced.

The following paragraphs review the agricultural products of the former German Possessions in greater detail, the three main divisions—Melanesia, Micronesia, and Samoa—being treated separately.

Melanesia.

The former German possessions in Melanesia have certain notable characteristics which render their economic position and prospects very different from those of the rest of the islands. Their extent gives far more scope for agricultural expansion than is afforded in either Micronesia or Samoa. Their climate, however, is in general unhealthy. For the most part, also, they are covered with vast and dense forests, so that the spread of cultivation must be slow and costly. And, as they include large areas remote from the sea, where the coco-palm will not thrive, planters will have to devote increasing attention to products which are less cheaply and easily cultivated. This, too, will retard the economic penetration of these territories.

Up to the present the Bismarck Archipelago has been more vigorously exploited than the other former German possessions in Melanesia. In 1913, only some 17,000 acres were under European cultivation in Kaiser Wilhelmsland, as against about 55,000 in the Bismarck Archipelago and the Solomon Islands. Of the latter area much the greater part must have belonged to the Bismarck Archipelago, as the German Solomons had notoriously been neglected.

Although the *coco-palm* is not so important in Melanesia as in other parts of the former German Islands, it is cultivated with great success near the sea, except where the coast is fringed by mangrove swamps.

The islands of Tumleo and Seleo, in Berlin Bay, off the coast of Kaiser Wilhelmsland, are particularly rich in coco-palms.

The cultivation of *cacao*, though most of the Pacific Islands are considered to be well adapted to it, has not made much headway in Melanesia. An experiment with the *forastero* variety in Bougainville is said, however, to have yielded promising results.

Several kinds of *rubber-yielding plants* grow in Kaiser Wilhelmsland, and rubber (mostly of the *ficus* and *hevea* varieties) is also cultivated in a few European plantations. In the Bismarck Archipelago it has been ousted by the coco-palm and cacao. It has also been tried in the Solomon Islands, but with small success.

Coffee has been grown experimentally in both Kaiser Wilhelmsland and the Bismarck Archipelago. The results in the former are reported to be satisfactory, but production on a large scale has been prevented by lack of labour.

Tobacco, though formerly cultivated on European plantations in Kaiser Wilhelmsland and the Bismarck Archipelago, has been abandoned by the white settlers, partly, it is said, for want of intelligent labour. It is still grown by the natives on Buka, in the Solomon group, and near the Sepik or Kaiserin Augusta river in Kaiser Wilhelmsland, where it is the object of a lively trade. None of the tobacco produced is suitable for the European market.

Cotton, on which great hopes were once set, has proved an utter failure, as in Melanesia it does not ripen till the end of the dry season and must be gathered during the rains.

Sisal hemp, on the other hand, is said to show great promise in Kaiser Wilhelmsland, though it has not done well in the Bismarck Archipelago, and in the Solomons the rainfall is too heavy for it.

Manioc or *cassava* has been introduced into the Gazelle Peninsula, in Neu Pommern; and in Kaiser Wilhelmsland experiments have been made with *rice*, which, it is thought, should do well in the low-lying districts. Rice-growing, however, needs expert knowledge which the natives do not possess, and it was suggested before 1914 that Malays and Chinese should be imported in order to establish its cultivation on sound principles.

Among other products of European plantations are *vanilla*, grown in Kaiser Wilhelmsland and the Bismarck Archipelago; *nutmeg*, cultivated in Kaiser Wilhelmsland; and *lemon grass*, which is used in the manufacture of volatile oils, and is cultivated on a small scale in the Bismarck group. *Plantains* are grown in Kaiser Wilhelmsland, and a number of familiar fruits and vegetables—some indigenous, some introduced by Europeans—flourish in all cultivated regions.

The natives raise very large quantities of *taro* and *yams*. The *batata* or *sweet potato*, *bread-fruit*, and *sugar-cane* are also grown by them, but the two last seem to be less popular in Kaiser Wilhelmsland than in most other parts of Oceania. *Bananas* are abundant, growing wild as well as in native plantations. A few natives cultivate *arrowroot*, and a little *maize* is grown in Kaiser Wilhelmsland. *Sago-palms* and *ivory-nut palms* grow wild in marshy regions, and the former are also cultivated by the natives. The ivory-nuts of the former German Islands are inferior in quality to those of South America, and the quantity exported was declining before the war.

Live-stock.—Several of the former German possessions in Melanesia are fairly well suited for the raising of live-stock. In Kaiser Wilhelmsland cattle-rearing has been attempted by German planters near Friedrich Wilhelmshafen and Konstantinhafen; and in 1914 the Neu Guinea Kompagnie gave a very favourable report of the results on their own stations. Oxen are largely used in the colony for traction. At Käwieng, in Neu Mecklenburg, the Germans established a station for cattle-breeding. Elsewhere in the Bismarck Archipelago cattle are few, though there are some districts where they might do well.

Under German rule, there were two sheep-farms in Kaiser Wilhelmsland, and the Government founded a sheep-breeding centre at Kieta in Bougainville, and arranged for the importation from Java of sheep of good stock. Sheep-rot is apt to cause trouble, but otherwise the animals are little troubled by disease.

A few horses are bred in Kaiser Wilhelmsland. Pigs and poultry are found in all parts of the former German Possessions, and are reared in great numbers by the natives.

The wild fauna of Kaiser Wilhelmsland includes birds of paradise and other birds of beautiful and valuable plumage. The slaughter of these was regulated by the German Government.

Micronesia.

Most of the islands of Micronesia are so small that they afford few opportunities for profitable agriculture. In 1913 the total area under cultivation by Europeans in the former German Islands was only about 7,500 acres.

Of the various groups, the Marshalls have hitherto been on the whole the most prosperous, but they offer little scope for agricultural enterprise. The Caroline and the Palau groups have received a good deal of attention, and on some of the larger islands agricultural prospects are fairly satisfactory. In the Marianas the soil is mostly fertile, but the larger islands are very rugged and the supply of labour is deficient.

The predominance of the *coco-palm* among the vegetable products is even more marked in Micronesia than in the other former German possessions. It grows particularly well on coral islands, though here it is exposed to the full fury of typhoons, which often do immense damage all over Micronesia. On many of the smaller islands there is not enough space for the systematic cultivation of the coco-palm, though it grows wild almost everywhere. The production of copra was steadily increasing under German rule, and such economic prosperity as Micronesia can hope to attain must be almost entirely dependent on it.

Cacao is grown on some small plantations on Koror, in the Palaus, and has been introduced into many other islands. In the Marshalls, however, it has been an undoubted failure.

Rubber has been tried without much success in the Marianas, but plants of the *hevea* variety from Kaiser Wilhelmsland have done well on Yap in the Carolines.

Coffee has been the object of experiments in all the groups of Micronesia. In the Carolines and the Marianas there is some prospect of success, though in the latter the plant is liable to a fungoid disease. The results in the Marshalls have been unsatisfactory.

A little *tobacco* is grown in the Marianas, though not on scientific lines. It is of a good colour, and is said to resemble Havana tobacco in flavour, but there is too much salt in the air for tobacco-planting to succeed.

Sisal hemp and *manila hemp* have been tried in the Mariana group, apparently with indifferent results. The latter has also been grown at Kusaie, in the Carolines.

Manioc is cultivated on a small scale in the Marianas, where also *rice* has been experimentally grown, with what success has not been ascertained.

Camphor is grown on the island of Ponape, in the East Carolines, and there are a number of camphor trees near Koror, in the Palau group.

Experiments with *indigo* have been made by the Japanese planters in the Palau Islands, but the results are doubtful.

The plants furnishing the staple native foods—*taro*, *yams*, and the like—are cultivated on most of the Micronesian islands. *Maize* is grown to a small extent by natives in the Carolines, the Palaus, and the Marianas. *Arrowroot* is found in the Carolines and the Marshalls, both wild and in native plantations.

Fruit of many kinds—notably *bananas* and *pineapples*—is generally abundant, except on the smaller coral islands. Among the wild products may also be mentioned *plantains* (found in the Marshalls), the *castor-oil plant* (which grows in the Marianas), the *sago-palm* and *ivory-nut palm* (both of which flourish in the marshy ground of the larger islands of the Caroline group). The last-mentioned palms suffered greatly in the celebrated typhoon of 1905, and the export trade in the nuts has never wholly recovered.

Live-stock.—There is very little good pasture in Micronesia, and few animals are kept. Only in the Marianas is serious attention given to stock-raising. In that group the island of Tinian has a large number of wild cattle descended from domestic animals introduced by the Spaniards, which before 1914 were Government property. Some were transported to Saipan, with the object of domesticating them, but all died a few weeks after their removal. The domestic cattle have apparently deteriorated, and give little milk, though they are still useful as draught animals. Cattle-breeding, if scientific principles are observed, should become one of the leading industries of the Mariana group.

A few cattle are kept in the Carolines and the Marshalls, but in the latter group they do not thrive.

Goats run wild on the island of Tinian, where they are regarded with disfavour on account of the damage they do to bread-fruit plantations. In Tinian there are also a few mules. Pigs and poultry, wild and domesticated, are found in most Micronesian islands, but the stock is usually poor.

Samoa.

The Samoan islands formerly owned by Germany were unquestionably the most prosperous of her Pacific possessions. A warm, moist, and equable climate, volcanic soil, and an adequate but not excessive rainfall render them highly productive. In 1913 upwards of 26,000 acres were under European cultivation, which it is estimated might profitably be extended over some 300 square miles. Of the two principal islands, Upolu is on the whole richer in vegetation than Savaii, but all the former German Islands, even the smallest, are fertile. The chief obstacle to their development has been the shortage of labour, to which reference has already been made.

Agriculture is much more varied in Samoa than in the other former German possessions. It is true that here, as elsewhere, the principal form of agriculture is the cultivation of the *coco-palm*; in 1913 more than 12,000 acres belonging to Europeans were devoted to it; there are many native plantations and countless wild palms.

In the favour of white planters, however, copra has a strong rival in *cacao*. Since the days of Robert Louis Stevenson, who was one of the first successful cacao planters in Samoa, its cultivation has extended enormously and become very profitable. In 1913, 9,000 acres owned by Europeans were under cacao. The variety generally grown is *forastero*, which is hardier than *criollo*, the kind first tried in Samoa. The average yield is 1,000 kilogrammes per hectare, or about 8 cwt. per acre. Rats and fruit bats are its chief enemies.

Rubber, after some disastrous experiments, has done well, and in 1913 was grown by Europeans on about 2,900 acres. The *hevea* variety is the only one cultivated on a large scale. At the outbreak of war, however, there were signs that rubber was losing favour among the planters, owing to the difficulty of obtaining suitable labour, the general decline in prices, and the high cost of transport from Samoa to the world's markets. If these disadvantages could be obviated, rubber-growing in Samoa should have a prosperous future.

A little *coffee* is grown, mainly by natives, and only for local consumption.

An experiment with *cotton* was unsuccessful for want of labour.

The *tobacco* plant grows widely, and is cultivated in some places by the natives, but nowhere by Europeans.

Bananas are abundant, and Samoa is the only part of the former German Pacific possessions where they are cultivated in European plantations.

The *kola-nut* has been grown on a small scale. Experiments with *vanilla* have yielded promising results. At the beginning of the war *mulberry trees* were also being tried.

Of vegetable foods used by the natives, *taro* and *yams* grow exceptionally well in Samoa, the Bulaka taro reaching a great size. *Bread-fruit* and *sugar-cane* also thrive. Fruit of various kinds is plentiful, and *pineapples* would repay cultivation. The natives cultivate a species of *pepper plant*, from the roots of which they make *kava*, a drink very popular among them.

Live-stock.—There are many cattle and horses in the former German Samoan Islands, but the stock is found to degenerate quickly, and fresh blood must constantly be introduced from abroad. In 1913 there were 4,500 head of cattle. They were largely used as draught animals, but increasing numbers were being kept by Europeans on coco-palm plantations, in order to check the growth of weeds. In 1914 the Germans were hoping greatly to increase the number of cattle, with a view to lessening the import of meat from Australia and New Zealand. Poultry and pigs abound in all the villages. Foreign breeds of poultry have been successfully crossed with native stock.

Silkworms were imported from Queensland by the Upolu Rubber and Cacao Co., but the results have not been made public.

(*b*) *Methods of Cultivation*

The introduction of European methods of agriculture into the Pacific Islands has made less difference than might be supposed, for the coco-palm requires little attention in normal circumstances. The Germans, however, effected some improvements in its cultivation, and did good work in combating the pests by which it is liable to be attacked. The chief of these are the rhinoceros beetle, the shield-scale, coco-canker, and pink disease. The rhinoceros beetle is particularly troublesome in plantations near primeval forest. The best way of coping with it is to remove the larvæ from the young plant; and the German authorities appointed "task-days," on which it was the duty of all male natives to search for and destroy the larvæ. It was proposed to introduce birds and insects which prey on the beetle, and plants which would attract it away from the coco-palm; but little seems to have come of these suggestions. The shield-scale does most damage in the Caroline and Palau groups. Coco-canker, which also attacks *hevea* rubber, is specially dangerous in wet years; its spread, which is commonly rapid, is best checked by removing shade trees, burning broken coco shells and using disinfectants. In 1913 the Deutsche Samoa-Gesellschaft lost 13,000 coco-palms by the disease. Pink disease is also prevalent in seasons of excessive rainfall; the part attacked must be burnt and treated with tar.

The application of modern methods to other agricultural products, though attempted on European plantations, meets with great difficulties owing to the ignorance of the native workers. The methods used by the natives on their own land are of course extremely crude. Their only agricultural implement is the bush-knife, a pointed stick somewhat resembling a hoe. They use carts, which were formerly made by themselves, but are now imported from Japan. Ploughs, however, were unknown among them until recent times, and are still very rare, and, it seems, regarded with but small favour. No manure is ever used, and no reasoned rotation of crops is in vogue. This is the more regrettable in view of the importance of taro to the natives, for taro is a very exhausting crop, and without manure cannot be grown for long on the same soil. Thus new ground is continually being broken at great expense of toil, while patches that will no longer support taro are left waste.

Much, however, was being done by the German Government to foster the industrial development of the islands, and to fit the inhabitants to exploit their economic resources. Stations were established for the instruction of the natives in rubber-growing, and a guaranteed minimum price of 1 mark per kilo was fixed for native-grown rubber. These measures quickly produced an improvement in the quality and output of rubber. The instructors at these establishments were Malays.

Arrangements were also made to train young natives in skilled craftsmanship, the pupils, in return for their training, having to work for the State for a specified period of time at a lower than the current rate of wages.

An experimental garden was made at Simpsonhafen; and there were botanical gardens at Moamoa in Samoa, from which seed and young plants for experimental culture could be obtained. In Samoa also native plantations were visited by official inspectors.

In 1912 schemes for training native labourers to replace Chinese and Malays, and for the appointment of foresters and agricultural experts, were approved by the Reichstag.

Besides Government undertakings, there were a certain number of private enterprises working to the same ends. The Katholische Mission had experimental plantations at which they taught agricultural method, and many other missions had industrial schools.

(c) *Forestry*

Kaiser Wilhelmsland and all the larger of the former German Pacific Islands are to a great extent covered with forests, and many of the coral atolls are clothed with thick bush, consisting mainly of shrubs and creepers, but partly of trees. Palms are the most common, various species being found, but bamboo, teak, banyan, mangrove, pandanus, hibiscus, eucalyptus, and acacia are of widespread occurrence. Other trees deserving mention are the *voi* of the Caroline Islands, the wood of which resembles mahogany, and the *da-uk* and *ifil* of the Marianas, the timber of both being strong and durable.

The forests have been but little exploited, and only for local requirements. The unhealthy climate, the hostility of the natives, the shortage of labour, and the lack of water-power and of navigable rivers are adduced in explanation of this neglect, but of course the incidence of these disadvantages varies much in the former German possessions, in some of which certain of them are not felt at all. Under German rule all forests were State property, and even when let to private undertakings remained under official control. Royalties were charged on timber felled if the quantity exceeded 2,000 cubic metres, the rates being 10*s*. per 100 cubic metres for quantities up to 4,000 cubic metres, and 50*s*. on each 100 cubic metres above that amount.

The largest and densest forests are in Melanesia. The most important trees of the inland forests of this region are teak, bamboo, banyan, and sandalwood. Teak is also grown in plantations established by the Germans. In Kaiser Wilhelmsland some ebony is found. In 1908 the firm of Holst & Doutreband obtained from the Government a concession for exploiting large areas of forest in Kaiser Wilhelmsland and Neu Pommern. The trees concerned were chiefly erima, aloup, cedar (so-called), and eucalyptus. The employment of Malay and Chinese wood-cutters was considered, but a prospecting expedition reported that in Kaiser Wilhelmsland the timber on the conceded territory was not good enough to command remunerative prices in the overseas market; and in the

Bismarck Archipelago, where better timber was at the firm's disposal, inadequate organization, the bad climate, and the labour shortage checked the undertaking at the outset. About the same time an Australian company also secured forestry concessions in Neu Pommern, but owing to lack of capital was not able to exploit them. The Neu-Guinea Kompagnie and the Catholic Mission erected a few saw-mills in Kaiser Wilhelmsland, but in 1914 these had nearly exhausted the material in their vicinity. The great rivers of Kaiser Wilhelmsland should prove useful for the transport of timber to the coast, but the distance of the colony from important markets renders the creation of a lucrative export trade very difficult.

The forests of Micronesia, though they yield many kinds of useful timber, are too small to attract capital from abroad. Those of Samoa, however, are extensive, and as they too contain a number of woods of commercial value, they should in future become a source of much wealth.

(*d*) *Land Tenure*

The policy of the Germans regarding land varied in different parts of their Pacific possessions, but everywhere they showed a preference for freehold tenure, in contrast to the British, who in their South Sea colonies allow settlers to hold land only on lease. Freehold land is much sought after by white planters, and the possibility of obtaining it in German possessions appears to have attracted thither a certain number of desirable colonists who would otherwise have gone to British territory.

In Kaiser Wilhelmsland and the larger islands of the Bismarck Archipelago land could easily be obtained by settlers of any nationality. The authorities readily gave information as to available land, and assisted new-comers in obtaining labour. When war broke out all the land belonging to whites in Kaiser Wilhelmsland was freehold. There were regulations safeguarding the interests of the natives: for instance, in the German Solomons the Government forbade the sale of native land bearing more than a certain number of coco-palms.

In Micronesia freehold land was only acquired with difficulty owing to the necessity of providing for the needs of the natives. In the Marshalls and Marianas, in fact, the sale of land to white men was prohibited; and in the latter Europeans might lease only such land as the natives did not need. The leasehold of certain smaller islands was granted by the Government for terms of five years.

The German authorities in Samoa reserved land for the natives at an average of 3 acres a head, and the natives were not allowed to sell, let, or mortgage any land except with the sanction of the Governor, which might be given only in the case of land lying within the plantations area. Up to 1914, however, this rule admitted of considerable expansion of estates owned by Europeans. Outside the area in question it was possible for Europeans to buy or lease Government land, but the supply was limited.

As regards prices, good land was offered by the Government in Melanesia at about 2*s*. an acre, payment for which might be spread over several years. In Samoa, on the other hand, where the soil is more fertile and unoccupied land less extensive, the Upolu Rubber and Cacao Estates paid 45*s*. an acre.

The German Government attempted to establish a colony of small planters, with 250 acres apiece, in the Baining Peninsula of Neu Mecklenburg. The project met with small success, for the settlers lacked the capital necessary to support the heavy initial expenses of cultivation in the South Sea Islands. It is estimated that the cost of preparing forest land for agriculture amounts, on an average, to £60 per acre, and the small planter is further placed at a disadvantage by the interval that elapses before the most profitable crops, such as coconuts and cacao, come to maturity. It appears, therefore, that the powerful company with large estates is destined to play the leading part in the agricultural development of these islands in the future.

The natives have various systems of tenure, and to review them all would necessitate an examination of many aspects of native society. In several of the former German possessions communal tenure prevails, though taro plantations seem almost everywhere to be treated as private property, doubtless because their success depends so much on the energy of the individual planter. The Melanesians, it appears, regard property in land with great respect. In some parts of Kaiser Wilhelmsland the sale of land is said to be unknown, and even lands conquered in war are not appropriated by the victors. In 1912 disturbances broke out near Friedrich Wilhelmshafen because the German authorities enforced the sale of certain native-owned land in that district.

(3) FISHERIES

Fish forms a notable part of the diet of the natives in all the former Pacific possessions of Germany. Many kinds are found, and the natives are generally expert and daring fishermen. Fish are often salted, but generally by crude methods and with unpleasing results.

Melanesia.

In Kaiser Wilhelmsland fresh-water fish abound in the rivers and sea-fish near the coast. Of the latter the barito is caught in the greatest numbers. Fishing is practised with special success off the islands of Seleo and Tumleo, in Berlin Bay. In the waters of the Bismarck Archipelago fish are also plentiful, and are taken in many ways, sometimes in wicker traps, sometimes in nets, and sometimes by spearing. Both boats and rafts are used by the native fishermen. Trepang fishing is successful in several parts of Melanesia, especially in Neu Hannover. The waters of Melanesia also yield tortoise-shell, pearl-shell, and pearls, but the production of these has of late declined. Tortoise-shell is one of the most important products of the former German Solomons, and there are valuable tortoise-shell fisheries off Kaiser Wilhelmsland. Pearl-shell is most abundant off the south-west coast of Neu Pommern, the north-west coast of Neu Mecklenburg, the Vitu or French Islands, and Gardner Island. The Admiralty Islanders fish for pearls, but an attempt to exploit the pearl fisheries in this region met with little success, although Japanese and Malay divers were employed.

Micronesia.

The waters round the Micronesian Islands are generally well stocked with fish. The natives of the Carolines are particularly bold and skilful in catching them. The outer reef of Ponape is a conspicuously rich fishing-ground, and of the fish taken here three kinds---shoe-fish, tiger-fish, and teat-fish—are cured and exported. Good soups, it is said, are made from them. The fish of the Marshall Islands, though numerous, are many of them poisonous at certain seasons; but sharks and mussels are taken in great numbers. Trepang, tortoise-shell, pearl-shell, and pearls are found in the waters of the Carolines, particularly off the island of Oroluk. Elsewhere in Micronesia these products are not of much importance. Trepang used to be plentiful off the Palaus, but too much was taken, and it was found necessary to give the best fishing-grounds time to recuperate. There are known to be considerable quantities of pearl-shell off the Marshall Islands, but hitherto little effort has been made to turn them to account.

Samoa.

The natives of Samoa catch great numbers of sea-fish, and a variety of chætopod is highly prized as a dainty. Fresh-water fish are generally rare, though eels are plentiful. The Samoan waters have hitherto yielded no trepang or shells of commercial value.

(4) MINERALS

The most important mineral of the former German Pacific Islands, and the only one which has hitherto been worked, is calcium phosphate. It is not certain whether any others exist in sufficient quantities to repay exploitation. The largest deposits of phosphate are found on Nauru, but the other minerals that have been traced occur almost exclusively in Melanesia. From a commercial standpoint, the mineral wealth of Samoa is negligible.

Melanesia.

Coal is stated to occur in the valley of the Nusa in the Finisterre Mountains (Kaiser Wilhelmsland). In the same colony brown coal has been found near Astrolabe Bay. Its analysis yielded the following result:—

	Per cent.
Carbon	53·5
Hydrogen	3·85
Oxygen and nitrogen	19·87
Ash	4·84
Water	17·94

The calculated calorific value is 4,638. Geologists hold that there is a likelihood of the discovery of further deposits of brown coal in many parts of Kaiser Wilhelmsland. If this expectation proves correct, the industrial development of the colony will be much facilitated, but it is improbable that any export trade in coal will ever be established.

Small quantities of *gold* have been found in several rivers of Kaiser Wilhelmsland, the richest being in the south, near the frontier of British New Guinea. In this district the Germans built roads, and established the station of Adolfhafen to protect the deposits. Gold has also been discovered in the north-west, on the borders of Dutch New Guinea, and in the Bismarck Mountains, and it is considered probable that it exists in some of the other ranges of the interior. German experts founded great hopes on the gold of Kaiser Wilhelmsland, but at the outbreak of war it had not been ascertained whether any deposits could be profitably worked. A little gold is known to exist in Bougainville, but here, too, no adequate prospecting has been done.

Copper, *platinum* and *iron* have been noticed near the Kabenau river in Kaiser Wilhelmsland; *osmiridium* has been traced, and *graphite* is known to occur in the interior. Among the minerals of the Bismarck Archipelago and the Solomon Islands are *gypsum*, *alum*, *sulphur* and *opals*; *copper* and *zinc* occur in trivial quantities in Bougainville. Useful *building-stones* and *clays* are found in Kaiser Wilhelmsland and the Bismarck Archipelago. The Purdy Islands, which lie to the south of the Admiralty group, are stated to possess extensive *phosphate* deposits, but no reliable estimate of their value has been made.

Mineralogists think it likely that *chromite*, *iridium* and *diamonds* will be discovered in Kaiser Wilhelmsland.

It was thought before the war that *petroleum* existed in the Eitape district of Kaiser Wilhelmsland. The German Government reserved the region in order to carry out investigations, and appointed a prospecting commission in 1914, but the results do not appear to be known.

Micronesia.

Except for *coal* of poor quality, which is found in the Palau Islands, the only mineral of any note in Micronesia is *phosphate of lime.* This, however, is of very great importance.

The formation of the phosphate deposits is due to the action of the heavy rains on accumulations of birds' excrement lying on coral rocks. The nitrates and phosphates of the excrement are dissolved and the phosphates unite with the lime of the coral to form insoluble calcium phosphate. Were it not for the heavy rainfall, the heat of the sun would convert the excrement into guano, as it does on the coasts of Chile and Peru.

Deposits of phosphate are to be found on many Pacific Islands, but are rarely large enough to warrant exploitation. Some of the islands where phosphate has hitherto been worked are Ocean Island (a British possession), Nauru, Angaur (in the Palau Islands), and Feys or Trommelin Island (in the Western Carolines). On Nauru it has been worked since 1906, on Angaur since 1909, but on Feys Island only since the Japanese took over the administration of the Carolines. The deposits in all these places are of excellent quality, especially those on Nauru, which contain 83 per cent. to 90 per cent. of tricalcic phosphate, with an average of 38·98 per cent. of phosphoric anhydride. The percentage of tricalcic phosphate in the Angaur and Feys Island deposits is in parts as high as 80. When first worked the phosphate from Angaur was rather too damp, and had often to be dried in Germany before it could be used in superphosphate factories; but the quality has improved and become more uniform. It is reported that there are valuable deposits on the island of Pililju, in the Palau group, but the information regarding them is not very definite.

In Nauru the deposits, which are worked by the Pacific Phosphate Company, cover about 4,500 acres, and it is estimated that they contain about 42,000,000 tons—a quantity which cannot be exhausted during the term of the present concession, which is to end in the year 2,000. The Angaur deposits, worked before the war by the Deutsche Südseephosphat-Gesellschaft, but now by a Japanese company, are thought to amount to 2,500,000 tons of phosphate, and those on Feys Island to between 300,000 and 600,000 tons.

The amount of phosphate exported from Nauru and Angaur in the years 1910-12 is shown in the following table:—

——	1910.	1911.	1912.
	Tons.	Tons.	Tons.
Nauru	140,381	87,041	136,496
Angaur	35,380	43,932	53,525
	175,761	130,973	190,021

The value of the combined exports of Nauru and Angaur in 1912 was £250,000. In 1913, 90,000 tons were shipped from Angaur, and in 1914, 60,000. In the case of Nauru no figures for these years are available, but it is known that the total amount shipped from Nauru from 1906 to 1915 was 781,000 tons. The comparative smallness of the amount exported from Nauru in 1911 was due to exceptionally stormy weather, which, as the island has no harbour, greatly interfered with loading. Angaur and Feys Island likewise lack harbours, and in all respects afford poor accommodation for shipping. At Nauru, however, facilities have been provided whereby, in good weather, 100 tons of desiccated and screened phosphate can be shipped in an hour.

Before the war the principal countries to which the phosphate of Nauru and Angaur was sent were Germany, Australia and New Zealand, and Japan.

The following figures show the amount taken by each in 1912:—

——	Germany.	Australia and New Zealand.	Japan.	Other Countries.
	Tons.	Tons.	Tons.	Tons.
Nauru	42,457	52,050	41,989	..
Angaur	12,299	10,331	17,907	12,988

During the late war the Nauru phosphate went only to Australia, New Zealand, and Japan.[1]

Before 1914 Germany imported over 800,000 tons of phosphate annually, but of late she has used basic slag instead. She is now dependent for phosphate on the countries of the *Entente* or their dependencies.

(5) MANUFACTURES

There are no factories in the former German Pacific Islands, unless the name be applied to the few saw-mills that have been established in Kaiser Wilhelmsland. What little manufacturing industry exists is carried on by the natives. Unfortunately, their craftsmanship has greatly deteriorated since it became possible for them to obtain cheap European manufactures in exchange for copra. Boat-building, which after agriculture is the chief native industry, has declined, and in some places the natives are beginning to forget the art, in which they once had extraordinary skill. The best boats and canoes are now made in the Bismarck Archipelago, the Carolines, and Samoa.

Good native pottery is produced on Bili-Bili, a small island off Kaiser Wilhelmsland. It is exported to all parts of New Guinea and even further afield. Pottery is also made in the Solomon Islands, exclusively by women. Elsewhere the art is but little practised.

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[1] See also " The Phosphatic Wealth of Nauru " in the *British-Australian* for December 4, 1919 (London).

In the Carolines the natives do a little weaving, but in most of the islands they prefer European textiles. Mat-plaiting is an important industry among the Samoans, who also make baskets and are skilful workers in wood and tortoise-shell.

A brown dye is obtained by the natives from the mangrove, which in places is cultivated for this purpose.

(6) Power

Electric power is used in the phosphate works on Nauru. There are electric trams and electric light at Apia and Rabaul. The river Kabenau in Kaiser Wilhelmsland might perhaps be used to generate power.

(C) COMMERCE

(1) Domestic

(*a*) *Principal Branches of Trade*

There is a lively native trade, carried on either by barter or with shells, etc., as a medium of exchange (*cf.* p. 87), in sago, native pottery, arms, and other commodities; and cheap low-grade fancy articles imported from Germany, described as rubbish by the Germans themselves, used to be in great demand in the inland districts. Copra, rubber, ivory-nuts, and other products are collected by native traders and brought to the European trading stations. The unfriendly relations which frequently exist between coast-dwellers and inland natives do much to hamper trade.

(*b*) *Towns*

There are no inland towns on any of the islands, and although inland villages are numerous in the low-lying parts of Kaiser Wilhelmsland, they have no economic significance, except as reservoirs of native labour.

The *ports* have already been described (see pp. 33-36).

(*c*) *Organizations to promote Trade and Commerce*

The efforts made to encourage agriculture, and thus indirectly develop the trade in rubber and other products, have already been noticed (see p. 57).

In Samoa a union of planters and traders, the *Pflanzer- und Handelsverein von Deutsch-Samoa*, was formed for the promotion of industry and for the purposes of self-protection: it brought about the introduction of Chinese contract-labour, and petitioned the Imperial Government for more control in local affairs and for the lightening of taxation, objecting among other things to the export duty on copra, and suggesting the taxation of undeveloped land (*cf.* p. 87).

(*d*) *German and Foreign Interests*

German Interests.—There were six leading German firms in the former German Pacific Islands:—

(i) The Deutsche Handels- und Plantagen-Gesellschaft, of Berlin, was founded in Hamburg in 1878, and established in Samoa and the Bismarck Archipelago. This firm had the sole right of enrolling labour for Samoa from the Bismarck and Solomon Islands, and did not therefore share the labour troubles of other Samoan firms. It had 18 coco-palm plantations, and owned about 150,000 acres, including 8,246 acres of coco-palms and 400 to 500 acres of cacao plantations. In 1912 its gross profits were £90,000; the dividends paid are said to have been 36 per cent. Its influence in Samoa was very great. Its business is now in the hands of a receiver, and stocks have been sold in the interests of other than non-resident creditors.

(ii) The Deutsche Neu-Guinea Kompagnie, of Berlin, obtained a charter in 1885 for the administration of Kaiser Wilhelmsland, but the charter was withdrawn on account of the unsatisfactory treatment of the natives and the slow development of the colony. The company had had the right to coin money, and a monopoly of the pearl-fishing, &c.; in compensation for these rights it received £20,000, 150 acres of land, and the sole right to exploit minerals in the valley of the Ramu, in respect of which, however, the Government reserved to itself the right of joint partnership or 10 per cent. of the profits. In 1913 the company was cultivating 17,305 acres of coco-palms, 2,560 acres of rubber, 713 acres of cacao, and 152 acres of sisal hemp, lemon grass, and citron grass. Its capital had been increased from £375,000 to £550,000, and it was paying a dividend of 5 per cent. It held over 357,000 acres of land, and had almost a monopoly of the rubber trade in Kaiser Wilhelmsland. Besides the plantations, it possessed wholesale and retail stores and a fleet of vessels for trading and recruiting. In Kaiser Wilhelmsland this company alone possessed the right to enrol more than 200 native workers.

(iii) The Hamburgische Südseeaktiengesellschaft, which is the successor of the firm of Mrs. E. E. Forsayth, of New Guinea, and was formerly called the Forsaythgesellschaft, had a capital of £100,000, and was a very important concern with stores and a fleet of vessels, as well as many coco-palm plantations. Its head office was at Rabaul. It paid a dividend of 13 per cent. in 1912, in spite of difficult labour conditions.

(iv) Hernsheim & Co., of Hamburg, a long-established firm, had trading stations and plantations on all the larger Bismarck and Solomon Islands. The firm owned Matupi Island, but in 1913 moved its headquarters from there to Rabaul. It also did a pioneering trade in the British Solomons. Hernsheim & Co. were the chief buyers of ivory-nuts. The firm had a capital of £90,000, and in 1913 paid a dividend of 7½ per cent.

(v) The Jaluit Gesellschaft originally administered the Admiralty, Marshall, Caroline and Mariana Islands, but was deprived of its authority in 1906. It acquired considerable American interests in the Carolines at the time of the sale of the islands to Germany, and had 23 good trading stations, chiefly staffed by foreigners, in the Marshalls and Carolines.

Its head station, at Jaluit, in the Marshall Islands, was well equipped, possessing extensive copra sheds and a wharf, and it owned nearly the whole Jaluit settlement. Shortly before the war it established the West Carolina Gesellschaft to exploit undeveloped land in Yap. It supplied coal to the German navy by means of chartered sailing vessels, which took copra on their return journeys. The company had eight trading schooners and a mail steamer, the "Germania," for its Hongkong-Sydney service (*cf.* p. 39), but in 1914 its employees were deported and the "Germania" chartered to Burns, Philp & Co. It did a large inter-island shipping business and had interests in the Pacific Phosphate Co., which, however, have since been sold. It had a capital of £60,000, and paid a dividend of 25 per cent. in 1911. It received £6,000 a year as subsidy for its Pacific Islands service.

(vi) The Deutsche Südseephosphat-Gesellschaft, of Bremen, was founded in 1908, with a capital of £225,000. It obtained from the Government a concession for 35 years on condition that it should pay a royalty of 1·25 marks per 1,000 kg. of phosphate obtained (a little over 1*s.* per ton), and that after the first 25 years the State should receive a gradually increasing percentage (40, 50, and 60 per cent.) of all profits accruing after payment to the shareholders of 8 per cent. Up to 1911 the company, though working the deposits on Angaur, had paid no dividend. The concession included phosphate working on the island of Pililju, in the Palau group.

There were also a considerable number of other German firms of less importance, and when in June 1917 the German South Sea Association petitioned the Bundesrat to recover Germany's Pacific colonies, they pointed out that the capital invested in them was over £500,000 in excess of that invested in any other colony except East Africa, and only £25,000 less than the sum invested there.

Japanese Interests.—Before the days of German rule Japan almost monopolized the trade of the smaller

Micronesian islands, especially the Marshalls. After Germany acquired the islands, Japanese influence declined, as Germany discouraged it in every possible way, but certain companies already established maintained their position, and did a good trade. Of these the two most important were the Hiki Company and the Mayurama Company, both of which traded in copra and fish in the Marianas. Since the Japanese occupation many Japanese traders have settled in the Marshall and Caroline Islands, and two of the larger companies, the Nanyo Boyeki Kaisha and the Nanyo Koygo Kaisha, have established headquarters on Jaluit. In 1917 a new firm, the South Pacific Trading Company, was floated in Yokohama to open up Japanese trade with Samoa and other Pacific Islands. Japan is now taking all the products of Micronesia, including the phosphate output of Angaur, which is worked by a Japanese company. She is also supplying Micronesia with imports and is likely to extend her trade in manufactured goods to other islands, since articles of a sort which is pleasing to native taste are among her characteristic products. The Japanese mercantile marine, which is subsidized by the Government, has increased enormously of late. An inter-insular service has already been established in Micronesia (*cf.* p. 40).

Australian Interests.—These are most extensively represented by the activities of Burns, Philp & Co., shippers and copra traders; their copra trade is especially flourishing in Samoa. The chief Australian plantations are in Samoa, *viz.*, the Moors Samoan Trading and Plantations, Ltd. (capital £60,000), at Apia, Savaii, and elsewhere, and the Papaseea Plantations, Ltd., at Apia and Tanumapua. The New Britain Corporation, Ltd., of Sydney (capital £10,000), has a plantation at Bougainville. Australia is the chief supplier of Samoa, and now takes most of the Nauru phosphate, but is not a good customer for copra.

British Interests.—These are chiefly represented by the Pacific Phosphate Company at Nauru and the Upolu Rubber and Cacao Estates, Ltd., in Samoa.

The Pacific Phosphate Company, of London, obtained from the Jaluit Gesellschaft a concession granted to that company by the German Government for 94 years from 1906, for the working of phosphate deposits in Nauru and other islands of the Marshall group; the terms of purchase were £25,000 in cash and 25,000 shares plus a royalty payable for 10 years. A fixed rent and a royalty on any excess over a specified tonnage of phosphate obtained were also payable to the German Government. The capital of the company in 1912 was £975,000, and up to 1914 it paid a dividend ranging from 25 to 50 per cent.; in 1908 it paid 50 per cent. dividend plus £250,000 in bonuses. The German shares in the company have all been sold since 1914.[1]

The Upolu Rubber and Cacao Estates, Ltd., is an amalgamation of the Upolu Rubber Co., of Glasgow, and the Upolu Cacao Co. The present company owned over 5,000 acres in 1914, and had a capital of £90,000. Its balance-sheet showed a profit of over £2,000.

(2) FOREIGN

(*a*) *Exports*

Melanesia.

By far the most important article of export from these islands is copra, which accounts for roughly four-fifths of the total value of the trade. Next in value come bird-of-paradise skins, rubber, mother-of-pearl and other shells, and cacao; the returns from these, though small, are on the whole increasing.

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[1] By Article 7 of the Nauru Island Agreement Act, 1920 (10 & 11 Geo. 5, ch. 27) the interests of the Pacific Phosphate Company in the island of Nauru are to be converted into a claim for compensation to be contributed by the Governments of the United Kingdom, the Commonwealth of Australia, and the Dominion of New Zealand.

The following table shows the value of the exports from German Melanesia in 1910, 1911, and 1912:—

——	1910.	1911.	1912.
	£	£	£.
Bird-of-paradise skins	8,550	13,900	22,450
Cacao	2,750	3,650	3,750
Copra	151,900	166,600	202,600
Crown pigeon feathers	..	400	850
Ivory nuts	1,600	1,000	1,300
Mother-of-pearl and other shells ..	4,650	8,100	6,250
Rubber and gutta-percha	3,950	5,350	8,150
Sisal hemp	400	200	500
Trepang	950	1,050	1,400
Turtle-shell	800	750	950
Wood	..	..	550
Miscellaneous	5,600	4,450	3,300
Total .. .	181,150	205,450	252,050

All but a small proportion of the exports used to go to Germany, which in the ten years preceding the war had, by means of the Norddeutscher Lloyd service, practically driven all other competitors from the field, increasing its share from less than one-third in 1904 to about nine-tenths in 1912. The following table shows the total value and the distribution of the exports in 1904, 1908, and 1910-12:—

Country of Destination.	1904.	1908.	1910.	1911.	1912.
	£	£	£	£	£
Germany	18,900	52,000	118,500	166,500	224,500
Australasia	20,450	26,850	54,500	28,900	20,500
Asia	13,300	850	2,900	3,650	5,500
America	..	.	1,000	550	..
United Kingdom ..	5,950	4,500	150	150	..
Other countries .	600	1,150	4,100	5,700	1,550
Total	59,200	85,350	181,150	205,450	252,050

In 1912 Germany took from her Melanesian islands copra to the value of £182,500, out of a total export worth £202,600.

Micronesia.

The predominant place held by copra in Melanesia is taken in Micronesia by phosphate. There has been a decrease both in quantity and value in the exports of phosphate from Nauru, but there has been a steady rise under both headings in the export from Angaur. In 1910, 140,381 tons, amounting in value to £428,050, were exported from Nauru; in 1911, 87,041 tons exported brought in £265,400; and in 1912, 136,496 tons were worth only £173,400. The exports from Angaur in the same years were 35,380 tons, 43,932 tons, and 53,525 tons; the values will be found in the table given below. The fall in the Nauru export in 1911 was due to violent hurricanes which prevented loading, but the lost ground was not altogether recovered in the following year.

In comparison with phosphate, the other commodities produced in these islands are insignificant in value, but there is a steady output of copra, chiefly from the eastern group, while mother-of-pearl shell, tobacco and trepang are exported from the western islands.

The following table shows the value of the exports from the East Caroline Islands, the Marshall Islands, and Nauru from 1910 to 1912:—

——	1910.	1911.	1912.
	£	£	£
Copra	49,150	46,650	82,800
Phosphate	428,050	265,400	173,400
Shark-fins	..	50	50
Turtle-shell	100	150	200
Miscellaneous	2,150	1,300	1,650
Total	479,450	313,550	258,100

The value of the exports from the West Caroline, Palau, and Mariana Islands was in the same years as follows:—

—	1910.	1911.	1912.
	£	£	£
Copra	14,500	11,800	15,100
Mother-of-pearl and other shells	6,100	6,650	1,650
Phosphate	46,850	62,500	76,150
Tobacco	300	350	200
Trepang	650	550	200
Miscellaneous	4,250	450	800
Total	72,650	82,300	94,100

There is no one country which stood out as the most important customer for goods from German Micronesia. The greater part went to Germany and Australasia, while Japan, trading specially in the Mariana Islands, also takes considerable quantities.

The following table shows the total value and the distribution of the exports from the East Caroline Islands, the Marshall Islands, and Nauru in 1904, 1908, and 1910-12:—

Country of Destination.	1904.	1908.	1910.	1911.	1912.
	£	£	£	£	£
Germany	18,800	40,100	118,800	130,750	80,600
Australasia	1,550	128,100	155,200	121,750	93,300
Asia	1,350	21,600	137,150	41,800	54,400
America .. .	1,000	..	22,850	12,050	17,650
United Kingdom ..	9,250	15,900	10,050	..	..
Other countries ..	7,200	..	35,400	7,200	12,150
Total	39,150	205,700	479,450	313,550	258,100

The distribution of the exports in the same years from the West Caroline, Palau, and Mariana Islands was as follows:—

Country of Destination.	1904.	1908.	1910.	1911.	1912.
	£	£	£	£	£
Germany .. .	2,450	2,550	30,750	26,950	18,900
Australasia	..	50	1,750	8,250	15,400
Asia	11,100	7,650	21,950	39,400	30,250
America	..	650	650	..	..
United Kingdom ..	..	750	2,100	..	50
Other countries ..	450	..	15,450	7,700	29,500
Total	14,000	11,650	72,650	82,300	94,100

Samoa.

Here, as in Melanesia, copra is the chief export, but the output of cacao is considerable and, like the smaller trade in kava and rubber, is increasing in value.

The following table shows the value of the exports from Samoa in 1910, 1911, and 1912:—

——	1910.	1911.	1912.
	£	£	£
Cacao	27,750	38,500	42,000
Copra	148,500	179,150	203,500
Kava	300	1,150	1,050
Rubber and gutta-percha ..	..	650	5,550
Tobacco	..	50	50
Miscellaneous	150	..	100
Total . .	176,700	219,500	252,250

Germany and Australasia used to be the most important customers, Germany buying slightly the larger quantities, including two-thirds of the cacao. The exports from Samoa to the United Kingdom were considerable in comparison with those from other parts of the former German Pacific Possessions. Japan, on the other hand, took nothing. Of a total export of copra in 1912, value £203,500, the value taken by Germany was £92,500 and that taken by Australasia £100,000, while the remaining £11,000 went to America.

The following table shows the distribution of the exports from Samoa in 1904, 1908, and 1910-12:—

Country of Destination.	1904.	1908.	1910.	1911.	1912.
	£	£	£	£	£
Germany	17,850	62,650	86,350	106,250	126,800
Australasia ..	19,200	44,550	69,050	90,550	102,200
America	6,750	6,950	6,500	500	12,050
United Kingdom ..	..	19,400	14,800	22,200	11,200
Other countries ..	39,950	..	..	..	..
Total ..	83,750	133,550	176,700	219,500	252,250

Present destination of copra.—Since 1914 the former German Pacific Islands have been supplying copra to Japan and America only. Japan takes all the produce of the islands she administers, whilst Kaiser Wilhelmsland, the Bismarck Archipelago, and Samoa are sending increasing quantities to America and Japan by sailing vessels. The American consumption has risen rapidly; San Francisco has set up many crushing mills and bids fair to become the centre of the western copra trade. Australia admits copra free of duty, but takes only a limited quantity, as it is not much used in the country, and enters into competition with Queensland butter.

(*b*) *Imports*

Melanesia.

The value of the imports in 1912 was as follows:—

	£
Beer, spirit, wines	13,400
Coal	12,400
Food	74,800
Machinery and tools	9,050
Metals and metal goods ...	34,800
Petroleum	5,250
Textiles and clothing	38,250
Tobacco	16,300
Other imports	74,650
Total	278,900

Specie to the value of £14,700 was also imported, bringing the total to £293,600, an increase of nearly £30,000 over the total for 1911, and of nearly £100,000 over that for 1910.

The provenance of these imports is shown in the following table. The large part taken by Germany in the trade was due to the shipping facilities already referred to. A considerable proportion of the goods arriving from Australia consisted of manufactured articles, such as textiles, ultimately of German or British origin.

Country of Origin.	1910.	1911.	1912.
	£	£	£
Germany	84,300	127,750	111,050
Australasia	55,900	66,250	94,700
Asia	44,700	51,900	59,200
America	4,150	6,050	15,700
United Kingdom	3,400	9,250	10,700
Other countries	2,050	3,750	2,250
Total	194,500	264,950	293,600

Micronesia.

The imports into the eastern group of islands increased largely between 1904 and 1908, and those into the western group between 1908 and 1910, owing to the development of the phosphate works on Nauru and Angaur respectively. In 1904 the value of the import trade of the eastern islands was £41,250; in 1908 £79,650; in 1911, £86,450; and in 1912, £98,230. In the case of the western islands, the total was £16,450 in 1904 and £19,450 in 1908, while in 1910 it rose to £37,500, in 1911 to £49,350, and in 1912 to £68,630, for, as has already been said, progress on Angaur was steadier than progress on Nauru. The following table shows the principal import values in 1912 for the two groups together:—

	£
Beer, spirit, wines	6,800
Coal	7,950
Food	61,800
Machinery	12,350
Metals and metal goods ...	19,650
Petroleum	2,000
Textiles and clothing	18,050
Timber and wooden goods ...	12,850
Tobacco	3,300
Other imports	13,310
Total	158,060

The value of specie imported was £8,800.

For the purpose of showing the countries of origin of these imports the two groups are treated separately, as there are certain significant differences between them in this respect, notably in the proportion of goods obtained from Australia. The increase in the imports into the second group from Asia, and the drop in those from America and the United Kingdom, are also remarkable and are to be accounted for by the efforts of Japan to extend her interests.

The imports to the East Caroline and Marshall Islands and Nauru were distributed as follows in 1910, 1911, and 1912:—

Country of Origin.	1910.	1911.	1912.
	£	£	£
Germany	15,450	23,100	22,030
Australasia..	42,900	43,000	59,000
Asia..	8,750	6,650	12,000
America	6,300	6,100	2,400
United Kingdom	7,150	7,250	2,500
Other countries	200	350	300
Total	80,750	86,450	98,230

The imports to the West Caroline, Palau, and Mariana Islands in the same years were distributed as follows:—

Country of Origin.	1910.	1911.	1912.
	£	£	£
Germany	13,900	20,300	25,750
Australasia..	5,050	9,750	15,600
Asia..	7,350	18,000	26,000
America	1,300	400	650
United Kingdom	8,050	500	400
Other countries	1,850	400	230
Total	37,500	49,350	68,630

Samoa.

Although the Samoan islands form only about one-hundredth part of the total area of the former German Pacific Possessions they take rather more than one-third of the total imports. The annual figures show a steady increase, rising from £115,850 in 1904 to

£125,150 in 1908, £173,100 in 1910, £203,300 in 1911, and £249,700 in 1912. The values for 1913 were as follows:—

	£
Beer, spirit, wines	11,022
Food	102,555
Machinery	12,861
Metal goods	11,531
Textiles	45,285
Tobacco	3,554
Wood and building material ...	37,361
Other imports	60,648
Total	284,817

The greater part of these imports came from Australia. The absolute, but not the relative, value of the contribution of Germany was growing. The import from the United Kingdom in 1912 was abnormally large and was not maintained. The increase in the imports from other countries in that year mainly represents goods from Honolulu.

The following table shows the provenance of the imports from 1910 to 1912:—

Country of Origin.	1910.	1911.	1912.
	£	£	£
Germany	42,050	42,700	49,300
Australasia	102,550	128,300	156,100
America	19,100	19,750	8,150
United Kingdom	3,550	7,600	22,950
Other countries	5,850	4,950	13,200
Total	173,100	203,300	249,700

General.—The proportion in which certain of the more important classes of goods were supplied by various countries in 1912 is shown by the following table, which includes the whole of the former German Pacific Possessions with the exception of Samoa. The cereal import from Asia consists largely of rice for the consumption of Chinese contract labourers. The proportion supplied by America would have been considerably greater had tobacco been included in the table:—

—	Germany.	Australia and South Sea Islands.	Asia.	America.	United Kingdom.	Other Countries.	Total.
	£	£	£	£	£	£	£
Machinery and hardware	40,100	26,450	4,150	1,800	3,100	250	75,850
Cereals, fruit, and vegetables	4,950	17,400	48,250	150	50	50	70,850
Meat, fish, and live animals	8,300	34,550	5,400	4,500	50	250	53,050
Textiles and yarn ..	15,850	7,000	8,750	400	7,850	150	40,000
Alcoholic beverages ..	17,150	1,200	750	50	250	850	20,250

(*c*) *Customs and Tariffs*

The Customs tariffs imposed by the German Government were arranged for the purpose of obtaining revenue and not for protective purposes. The general import duty was 10 per cent. *ad valorem*, which in Samoa, however, had shortly before the war been raised to 12½ per cent. Certain classes of goods were subject to exceptional treatment: on cigars the duty was 20*s*. per thousand, on cigarettes 10*s*. per thousand, and on tobacco about 1*s*. 3*d*. per pound, while on spirits and liqueurs it was about 9*s*. a gallon, on wines at the rate of 25 per cent. or 20 per cent. *ad valorem*, according to their nature, and on beer about 7*d*. a gallon. Among articles exempt from duty were scientific instruments, transport material, machinery and tools, animals, seeds, fodder and manures, &c., stationery for office use, rice, salted meat and fish, timber and building material, and all material and appliances required for the exploitation of phosphate, &c. The import tax on the rice imported for Chinese needs was remitted in 1914 in order to lessen the cost of plantation labour.

Export duties of 10*s*. per ton on copra and 6*d*. per ton on phosphate were levied in Micronesia. In Samoa in 1914, 20*s*. per ton was payable on copra and 30*s*. on cacao.

In order to put a stop to the indiscriminate slaughter which threatened the birds with extinction, the export duty on bird-of-paradise skins was increased fourfold in 1913, and in 1914 the export was prohibited altogether.

Export duties on cacao, copra, and rubber are now levied in those former German Pacific Islands which are in British occupation.

(D) FINANCE

(1) *Public Finance*

The *revenue and expenditure* of the former German Pacific Possessions, except Samoa, for the years 1909 to 1914 inclusive, were as follows in round figures :—

—	Revenue. (Exclusive of Imperial subsidy.)	Imperial subsidy.	Expenditure.
	£	£	£
1909	61,000	45,800	116,000
1910	78,000	46,150	120,000
1911	89,000	37,950	126,000
1912 ..	99,500	60,400	138,000
1913 (estimates)	88,000	66,350	170,500
1914 (estimates)	104,750	85,850	191,650

The details for 1914 were as follows:—

Revenue.		Expenditure.	
	£		£
Taxes	20,000	Administration ..	130,850
Customs	57,500	Fleet	25,600
Various services ..	27,250	Extraordinary expenses ..	35,200
Balance from previous year	1,050		
Imperial subsidy ..	85,850		
Total ..	191,650	Total ..	191,650

The returns for 1914 show on the one hand an increase of revenue due to the extension of the native poll-tax and, in spite of a loss of £2,000 by the prohibition of the export of bird-of-paradise skins, a growth in the customs duties; and on the other hand an increased expenditure due to additional expenses for military purposes.

In corresponding years the revenue and expenditure of Samoa were as follows:—

	Revenue.	Expenditure.
	£	£
1909	36,500	41,500
1910	43,000	43,500
1911	51,000	46,000
1912	59,000	50,000
1913 (estimates)	48,500	56,500
1914 (estimates)	59,500	68,700

The details for 1914 were as follows:—

Revenue.	£	Expenditure.	£
Taxes	16,000	Administration ..	49,300
Customs	38,500	Extraordinary expenses	17,750
Various services	5,000	Reserve in compensation fund ..	1,650
Balance from previous year	9,200		
	68,700		68,700

The increase in the expenditure for 1914 was due to preventive work in connection with coco-palm and cacao pests and to measures for spreading the use of the German language.

The *Imperial subsidy* granted to the various German Pacific Islands from 1899 to 1914 amounted altogether to considerably over £1,000,000. No subsidy was granted to the Marshall Islands until 1906, when the administration of the Jaluit Gesellschaft was brought to an end; and none has been received by Samoa since 1908.

Under German rule the principal *direct taxes* were the poll-tax and the trade-tax.

The poll-tax was levied on all adult males, except Government officials and missionaries. Europeans paid £2 a year and Chinese £1; the sum exacted from natives ranged from 3 to 10 marks, varying in different localities according to their prosperity, the rate of wages current, and other economic factors. In Kaiser Wilhelmsland the minimum was 5 marks, the maximum 10, and the tax might be worked off at the rate of 20 pf. (2½*d.*) for each day's labour. There was a uniform charge of 7 marks in the Bismarck Archipelago and of 4 in Samoa, while only 3 were exacted in the Marianas. It must be remembered that the raising of revenue was perhaps not the primary object of the imposition of the tax on natives, for it was thought that the need of earning money to pay it would compel them to seek employment from Europeans.

The trade-tax was levied on commercial houses and weighing-stations, and fell solely on traders and planters. In the Marshall Islands these were divided into six classes, paying respectively £2, £4, £6, £12, £20, and £30 a year.

Other taxes were imposed for special purposes from time to time. Thus, in 1904, 12 marks were exacted from all heads of families in Samoa as a contribution towards the expense of suppressing a rebellion.

Most of the revenue obtained from the former German Pacific Possessions, however, came from customs duties, which were especially heavy in Samoa.

The British plan of creating an "island fund" for use in emergency (*e.g.*, to relieve the population after a typhoon) was never adopted by the Germans; but extraordinary demands on the exchequers of Rabaul or Apia were met by increasing the Imperial subsidy.

The distribution of taxation in the former German Pacific Islands was criticised by the European colonists on the ground that they had to pay more than their just share. They maintained that the natives escaped too lightly; resented the exemption of officials and missionaries; and grumbled at the high import duties, which certainly were paid for the most part by Europeans, as the natives bought few imported goods. The settlers advocated the imposition of a property-tax on the Prussian model, and also the taxation of undeveloped land. Their complaints received some support in Germany, where publicists interested in colonial policy urged that the Imperial grants to the South Sea protectorates were too small in relation to the amount levied locally; successive Ministers for the Colonies, it was said, retarded the exploitation of the islands by undue concern for economy. It is, however, true that in 1912 the Reichstag accepted elaborate schemes for the construction of public works and the promotion of education in the former German Pacific possessions.

(2) *Currency*

Before the war German coinage was the only legal tender, and the authorities made strenuous efforts to suppress the use of native currency. Their exertions naturally achieved little result in the inland regions of the larger Melanesian islands, but in the smaller and more civilized islands and especially at the ports, they had attained a considerable measure of success. With the natives shells are the most popular medium of exchange, many kinds being used for this purpose, and there are native shell-capitalists, and even shell-usurers, who make loans at high rates of interest. Barter is everywhere common, based on an elaborate scale of relative values; in some islands, for instance, a little pig is worth ten spears. European traders often barter their goods to the natives for copra. Between Kaiser Wilhelmsland and the Bismarck Archipelago there is a long-established barter in sago, earthenware, and other native products; business is conducted from boats, and the open sea serves as market-place.

(3) *Banking*

In 1911 the firm of Forsayth established a Trade and Savings Bank at Rabaul. It did a moderate amount of local business, but seems to have offered no assistance to foreign trade. Admirable facilities for making remittances to other countries were, however, supplied by the post-office.

The Commonwealth Bank has now established a branch at Rabaul. There was no German bank in Samoa—a lack which was much deplored by the settlers.

(4) *Influence of Foreign Capital*

The principal sources of the capital employed before 1914 in the development of the former German Pacific Possessions have been sufficiently indicated above (pp. 69-73). Except in the working of the phosphate of Nauru, the influence of non-German capital was small.

APPENDIX

I

ARRANGEMENT BETWEEN GREAT BRITAIN AND GERMANY RELATIVE TO THEIR RESPECTIVE SPHERES OF ACTION IN PORTIONS OF NEW GUINEA

Parliamentary Papers, 1884-85, vol. LIV [C.—4441]

No. 1

Earl Granville to Count Münster

Foreign Office, *April* 25, 1885.

M. l'Ambassadeur,

IN the note which I did myself the honour to address to you on the 16th ultimo, I stated that Her Majesty's Government were disposed to suggest that the boundary between the British and German Protectorates in New Guinea should be, on the north-eastern coast, the point of intersection of the 8th parallel of south latitude, and that, as regards the interior, a fair and equal division of the territories should be arrived at by means of a conventional line or lines, to be drawn from the coast boundary to some point on the 141st meridian of east longitude, which divides the Dutch possessions from the rest of the island.

Her Majesty's Government are now prepared to propose a line which will, in their opinion, answer to these conditions. It would run as follows:—

Starting from the coast near Mitre Rock, on the 8th parallel of south latitude, it would follow that parallel until it is intersected by the meridian of 147° east longitude; would proceed thence in a straight line in a north-westerly direction to the point of intersection of the 6th parallel of south latitude with the 144th meridian of east longitude; and would continue thence in a west-north-westerly direction until it meets the point of intersection of the 5th parallel of south latitude with the 141st meridian of east longitude.

This line would give an area on the German side of about 67,000, on the English side of about 63,000, square miles, and would nearly approach the water-parting line, or natural boundary.

I should be glad to hear from your Excellency whether it would be considered by the German Government to be a satisfactory frontier.

I have, &c.
(Signed) GRANVILLE.

No. 2

Count Münster to Earl Granville.—(Received April 29)

Accepts proposed boundary.

II

DECLARATION BETWEEN THE GOVERNMENTS OF GREAT BRITAIN AND THE GERMAN EMPIRE RELATING TO THE DEMARCATION OF THE BRITISH AND GERMAN SPHERES OF INFLUENCE IN THE WESTERN PACIFIC

[*Signed at Berlin, April* 6, 1886]

Parliamentary Papers, 1886, vol. LXXIII [C.—4656]

* * * * * *

1. For the purpose of this Declaration the expression " Western Pacific " means that part of the Pacific Ocean lying between the 15th parallel of north latitude and the 30th parallel of south latitude, and between the 165th meridian of longitude west and the 130th meridian of longitude east of Greenwich.

2. A conventional line of demarcation in the Western Pacific is agreed to, starting from the north-east coast of New Guinea, at a point near Mitre Rock, on the 8th parallel of south latitude, being the boundary between the British and German Possessions on that coast, and following that parallel to point A, and thence continuing to points B, C, D, E, F, and G, as indicated in the accompanying charts, which points are situated as follows :—

A. 8° south latitude, 154° longitude east of Greenwich.[1]
B. 7° 15′ south latitude, 155° 25′ east longitude.
C. 7° 15′ south latitude, 155° 35′ east longitude.
D. 7° 25′ south latitude, 156° 40′ east longitude.
E. 8° 50′ south latitude, 159° 50′ east longitude.
F. 6° north latitude, 173° 30′ east longitude.
G. 15° north latitude, 173° 30′ east longitude.

The point A is indicated on the British Admiralty Chart 780, Pacific Ocean (South-West sheet); the points B, C, D, and E are indicated on the British Admiralty Chart 214 (South Pacific Solomon Islands); and the points F and G on the British Admiralty Chart 781, Pacific Ocean (North-West sheet).[2]

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[1] This arrangement was modified by the agreement of November 1899 (see below, p. 93), by which Germany ceded to Great Britain the Solomon Islands previously German, except Bougainville and Buka.

[2] The points indicated in this paragraph are shown in the map annexed. Copies of the original charts annexed to the Declaration have been deposited in the Library of the House of Commons for reference.

3. Germany engages not to make acquisitions of territory, accept Protectorates, or to interfere with the extension of British influence, and to give up any acquisitions of territory or Protectorates already established in that part of the Western Pacific lying to the east, south-east, or south of the said conventional line.

4. Great Britain engages not to make acquisitions of territory, accept Protectorates, or interfere with the extension of German influence, and to give up any acquisitions of territory or Protectorates already established in that part of the Western Pacific lying to the west, north-west, or north of the said conventional line.

* * * * * *

6. This Declaration does not apply to the Navigator Islands (Samoa), which are affected by treaties with Great Britain, Germany, and the United States; nor to the Friendly Islands (Tonga), which are affected by treaties with Great Britain and Germany; nor to the Island of Niué (Savage Island), which groups of islands shall continue to form a neutral region; nor to any islands or places in the Western Pacific which are now under the sovereignty or protection of any other civilised Power than Great Britain or Germany.

* * * * * *

III

DECLARATION BETWEEN GREAT BRITAIN AND GERMANY RELATING TO THE RECIPROCAL FREEDOM OF TRADE AND COMMERCE IN THE BRITISH AND GERMAN POSSESSIONS AND PROTECTORATES IN THE WESTERN PACIFIC

[*Signed at Berlin, April* 10, 1886]

* * * * * *

2. The Government of Her Britannic Majesty and the Government of His Majesty the Emperor agree that the subjects of either State shall be free to resort to all the possessions or Protectorates of the other State in the Western Pacific, and to settle there, and to acquire and to hold all kinds of property, and to engage in all descriptions of trade and professions, and agricultural and industrial undertakings, subject to the same conditions and laws, and enjoying the same religious freedom, and the same protection and privileges, as the subjects of the Sovereign or Protecting State.

3. In all the British and German possessions and Protectorates in the Western Pacific the ships of both States shall in all respects reciprocally enjoy equal treatment as well as most-favoured-nation treatment; and merchandise of whatever origin imported by the subjects of either State, under whatever flag, shall not be liable to any other or higher duties than that imported by the subjects of the other State or of any third Power.

* * * * * *

5. Both Governments engage not to establish any penal settlements in, or to transport convicts to, the Western Pacific.

6. In this Declaration the words "possessions and Protectorates in the Western Pacific" shall not include the Colonies which now have fully constituted Governments and Legislatures.

. . . . .

IV

FINAL ACT OF THE CONFERENCE ON THE AFFAIRS OF SAMOA

[*Signed at Berlin,* June 14, 1889]

Parliamentary Papers, 1890, vol. LXXXI [C.—5911]

* * * * * *

Article I.—A Declaration respecting the Independence and Neutrality of the Islands of Samoa, and assuring to the respective Citizens and Subjects of the Signatory Powers Equality of Rights in said Islands; and providing for the immediate restoration of Peace and Order therein.

It is declared that the islands of Samoa are neutral territory, in which the citizens and subjects of the three Signatory Powers have equal rights of residence, trade, and personal protection. The three Powers recognise the independence of the Samoan Government, and the free right of the natives to elect their Chief or King, and choose their form of government according to their own laws and customs. Neither of the Powers shall exercise any separate control over the islands or the Government thereof.

* * * * * *

V

CONVENTION AND DECLARATION BETWEEN THE UNITED KINGDOM AND GERMANY FOR THE SETTLEMENT OF THE SAMOAN AND OTHER QUESTIONS

[*Signed at London, November* 14, 1899]

Parliamentary Papers, 1900, vol. CV [Cd. 38]

* * * * * *

ARTICLE I

Great Britain renounces in favour of Germany all her rights over the islands of Upolu and of Savaii, including the right of establishing a naval and coaling station there, and her right of extra-territoriality in those islands.

Great Britain similarly renounces, in favour of the United States of America, all her rights over the island of Tutuila and the other islands of the Samoan group east of 171° longitude west of Greenwich. . . .

ARTICLE II

Germany renounces in favour of Great Britain all her rights over the Tonga Islands, including Vavau, and over Savage Island, including the right of establishing a naval station and coaling station, and the right of extra-territoriality in the said islands.

Germany similarly renounces, in favour of the United States of America, all her rights over the island of Tutuila and over the other islands of the Samoan group east of longitude 171° west of Greenwich.

She recognises as falling to Great Britain those of the Solomon Islands, at present belonging to Germany, which are situated to the east and south-east of the island of Bougainville, which latter shall continue to belong to Germany, together with the island of Buka, which forms part of it. . . .

* * * * * *

Declaration

It is clearly understood that by Article II of the Convention signed to-day Germany consents that the whole group of the Howe Islands, which forms part of the Solomon Islands, shall fall to Great Britain.

It is also understood that the stipulations of the Declaration between the two Governments signed at Berlin on the 10th April, 1886, respecting freedom of commerce in the Western Pacific, apply to the islands mentioned in the aforesaid Convention.

VI

CONVENTION BETWEEN THE UNITED KINGDOM, GERMANY, AND THE UNITED STATES OF AMERICA FOR THE ADJUSTMENT OF QUESTIONS RELATING TO SAMOA

[*Signed at Washington, December* 2, 1899]

Parliamentary Papers, 1900, vol. CV [Cd. 39]

* * * * * *

ARTICLE II

Great Britain renounces in favour of the United States of America all her rights and claims over and in respect to the island of Tutuila and all other islands of the Samoan group east of longitude 171° west of Greenwich.

Germany in like manner renounces in favour of the United States of America all her rights and claims over and in respect to the island of Tutuila and all other islands of the Samoan group east of longitude 171° west of Greenwich.

Reciprocally, the United States of America renounce in favour of Germany all their rights and claims over and in respect to the islands of Upolu and Savaii, and all other islands of the Samoan group west of longitude 171° west of Greenwich.

ARTICLE III

It is understood and agreed that each of the three Signatory Powers shall continue to enjoy, in respect to their commerce and commercial vessels, in all the islands of the Samoan group, privileges and conditions equal to those enjoyed by the Sovereign Power in all ports which may be open to the commerce of either of them.

* * * * * *

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The Caroline Islands and adjacent groups are shown on Intelligence Division Map No. 881 (on Mercator's projection—Ordnance Survey, January 1919).

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Extent

The New Hebrides, with which are generally included the Banks and Torres Islands, form a long chain of islands in the south-western Pacific, between 13° 5′ and 20° 20′ south latitude and 166° 30′ and 170° 15′ east longitude. The nearest groups are the Santa Cruz Islands (British) to the north, the Fiji Islands (British) to the east, and the Loyalty Islands and New Caledonia (French) to the south-west. The distance of the New Hebrides from the coast of Queensland is about 1,000 miles.

The islands may be divided into four groups, which are, from north to south: (i) The Torres Islands or Vava (Ababa), five small islands; (ii) the Banks Islands, including Vanua Lava, Gaua (Santa Maria), and several small islands; (iii) the northern New Hebrides, including Espiritu Santo (Marina), Malekula, Epi, Efate (Vaté or Sandwich), Ambrym, Aragh or Pentecost, Aurora (Maiwo), and several smaller islands, all arranged in the shape of a Y, the two arms of which meet at Epi; and (iv) the southern New Hebrides, which are widely scattered and include Eromanga, Tana (Aipera), Aneityum, and certain small islands. Some of the islands are only partially explored; and the coasts, in places, are imperfectly charted.

The total land area of all the islands is about 6,000 sq. miles, but estimates vary a great deal and some are 5 per cent. lower. To this total the Torres Islands contribute 51 sq. miles, the Banks Islands 306 sq. miles, and the New Hebrides proper 5,646 sq. miles. The largest islands are Espiritu Santo, 1,900 sq. miles, Malekula, 980 sq. miles, Eromanga, 429 sq. miles, and Vanua Lava, 136 sq. miles.

(2) SURFACE, COASTS, AND RIVERS

Surface

All the large and most of the small islands of the New Hebrides proper and the Banks Islands are volcanic and rise to considerable elevations, the loftiest being the small island of Lopevi, which rises to 4,755 ft. The large islands have each several summits of 2,000 to 3,000 ft. Many of the peaks are volcanoes, but only three are known to be active—Ambrym, Lopevi, and Tana. Earthquake shocks frequently occur throughout the islands.

The Torres Islands are all of coral formation, as are also a few small islands in the southern New Hebrides and in the Reef Islets of the Banks group. Coral limestone enters into the formation of many of the volcanic islands.

All except the low coral islands are rugged; flat land is not extensive and is found chiefly at the mouths of valleys. Espiritu Santo has some undulating upland plains, and Ambrym has in its centre a plain of ashes five to six miles wide at a height of about 2,000 ft.

Coasts

The coasts as a rule are steep. Coral reefs are generally absent, except on the east and south coasts of Malekula and a few of the other large islands; and good harbours, especially for small vessels, are numerous. Without shelter landing is frequently impossible, or at least dangerous, on the weather side of the islands.

Between the larger islands of all these groups there is as a rule deep water, and there are few dangers to navigation except strong tide-rips in many of the channels.

Rivers

The large islands have numerous clear streams which flow throughout the year. Only on the coral islets is there any shortage of water.

(3) CLIMATE

The climate is warm and moist. January, February, and March are the warmest months, with mean temperatures of about 82° F. (28° C.). August is the coolest month, with a mean temperature ranging from 72° to 76° F. (22° to 24° C.) at the sea level. The prevailing winds are the trades, generally from south-south-east to east-north-east. During the fine season, from April to October, they are most regular and rise and fall in strength with the sun, but from November to April they are interrupted by frequent calms and north-westerly squalls. Occasional destructive hurricanes occur in January, February, and March, but the New Hebrides lie somewhat outside the regular cyclone track. Rainfall is heavy; it occurs principally between November and April, but in many islands the distinction between dry and wet seasons is not great. The total annual rainfall is about 75 in. (1·8 m.).

(4) SANITARY CONDITIONS

The islands are on the whole unhealthy for Europeans, and this is especially true of the larger islands, where many marshes give ideal conditions for the breeding of mosquitoes. Malarial fevers and dysentery are common. Tuberculosis is said to be common among the natives on some islands, particularly in the Banks group. Elephantiasis also occurs. A frequent form of skin disease, characterized by ulcers, is often mistaken for leprosy, but it is said to be caused by the poisonous irritation of a plant called *salato*.

(5) RACE AND LANGUAGE

The majority of the inhabitants are Melanesians, but in many islands there is a distinct Polynesian strain. This is most marked in Futuna, Mae, Aoba, and the Banks Islands. A pygmy race, of Melanesian or Papuan stock, has been found in the interior of Espiritu Santo. All the natives are termed *kanakas* (Fr. *canaques*) by the settlers, irrespective of race, *kanaka* being the Hawaiian for 'man'.

The native languages are various Melanesian and Polynesian dialects, each confined as a rule to one district and in some cases even to one village, and so divergent from one another that the inhabitants are mutually unintelligible. The Banks Islanders have a language of their own with many dialects. The *lingua franca* is *bêche-de-mer* English to which are added a number of Fijian and French words. The official languages are English and French. A knowledge of English has been widely spread by missionaries on islands like Aneityum, and it has also been acquired by many natives who have worked as contract labourers on Queensland plantations. French is little used.

(6) POPULATION

Distribution

Most of the islands are well populated, and as a rule the population is denser round the coasts than in the interior. Only a few of the small islets are uninhabited. There is no accurate census, but an estimate made in 1910 gave the total native population of the New Hebrides, Banks, and Torres Islands at 65,000. Another estimate puts it at only 60,000. Each island has many villages. Vila (Fila) in Efate has been the seat of government since 1907; it has an excellent harbour. The British Residency is on Iririki Island in the centre of the harbour, and the French Residency on the mainland in the centre of a part of the settlement called Franceville.

The white population of the islands in 1909 was 296 British and 546 French, scattered throughout the group. The French settlers probably hold the best land, and France has done a good deal to foster settlement and trade. In the Banks and Torres Islands British interests are the stronger.

Movement

The native population is reported to be decreasing practically everywhere, owing largely to civil war and the introduction of drink and disease, while in the past the recruiting of natives for Queensland plantations depleted the population of many islands. It is said that the early sandal-wood traders, by their wars with the natives of Eromanga, enormously reduced the population of that island. It is impossible, however, to give any figures for the general rate of decrease.

II. POLITICAL HISTORY

Chronological Summary

1606. A Spanish fleet discovers Espiritu Santo.
1768. Bougainville's explorations.
1773. Cook's explorations.
1839. John Williams, British missionary, lands and is murdered at Eromanga.
1842. Two British missionaries sent to Tana.
1848. A British missionary sent to Aneityum.
1848. Père Rougeyron, the first French missionary, lands in Aneityum.
1850. The French missionaries abandon the archipelago.
c. 1850. Period of whalers and sandal-wood cutters.
1853. France annexes New Caledonia.
c. 1875. French and British colonization begins, and recruiters of native labour arrive.
1877. The missionary, John Paton, demands annexation.
1878. France and Great Britain repudiate any intention of annexing the islands.
1880. Governor of Fiji becomes High Commissioner for the Western Pacific.
1882. The Compagnie Calédonienne des Nouvelles-Hébrides founded at Numea.
1884. Foundation of the Anglo-Australian Company.
1886. French troops sent from Numea to Vaté and Malekula.
1887. French missions resume work.
1887–8. Creation of Joint (British and French) Naval Commission.
1888. French troops withdrawn.
1901. Governor of New Caledonia becomes General Commissioner for the Pacific.
1902. A British and a French Deputy Commissioner appointed for the New Hebrides.
1904. Great Britain and France agree to discuss the terms of a Condominium.
1906. The Condominium Convention signed.
1914. French and British delegates meet in London, June–August 1914, and agree on a Protocol, amending the Convention of 1906.

(1) DISCOVERY AND EARLY EXPLORATION

In 1606 a Spanish squadron, which had sailed from Peru in quest of the Southern Continent, anchored in a bay of the largest and northernmost island of the archipelago to be known later as the New Hebrides. The commander, Queiros, took possession of the country, which he believed to be part of the great southern mainland, in the name of the King of Spain, and called it Austrialia del Espiritu Santo, while the port was named La Vera Cruz. But his stay was brief, for he quarrelled with the natives, and his men were decimated by fever. Nine months after his departure Queiros was back in Spanish America, where he attempted to interest the Government in his discovery. Failing to obtain official support he fell back on private enterprise; and he was on the point of starting a new expedition when he died, in 1614.

After the departure of the Spaniards the archipelago lay forgotten for a century and a half. In 1768 M. de Bougainville ascertained and announced to the world that the land discovered by Queiros was not a continent but one of a group of islands, to which he gave the name of the Great Cyclades. In 1773 Cook explored the entire group, which he renamed the New Hebrides. He gave names to the greater number of the islands, the capes, and the bays, and left subsequent navigators but little to discover or describe. The archipelago was subsequently visited by La Pérouse and a few other French and English navigators.

(2) MISSIONARY ENTERPRISE

In the first half of the nineteenth century new actors began to appear on the scene. In 1839 an English missionary, John Williams, landed at Eromanga and was immediately murdered by the natives. In 1842 the

London Missionary Society sent to Tana two missionaries, who were quickly expelled by the natives; and a third was dispatched in 1848 to Aneityum, where the reception was more friendly. In 1856 George Selwyn, Bishop of New Zealand, arrived with John Coleridge Patteson, who was consecrated Bishop of Melanesia five years later. Meeting with a hostile reception from the Presbyterian missions in the southern islands, Patteson devoted himself at intervals to those in the north until his death. In 1857 Gordon settled at Eromanga, and in 1858 John Paton landed in Tana, which proved less inhospitable than in 1842. A mission was established in Efate (Vaté or Sandwich Island) in 1864, and in 1870 Goodwill started work in the chief island, Espiritu Santo. The English missions were well provided with money, and received supplies from a ship which was employed for that sole purpose.

French missionary enterprise began nearly a generation later than English. In 1848 Père Rougeyron and some other priests, who had been ejected from New Caledonia by a sanguinary persecution, landed in Aneityum; and in the following year a bishop arrived with a fresh contingent of missionaries. But sickness and the hostility of the natives compelled them one after another to leave the island, and in 1850 the mission work of the French in the archipelago was abandoned. It was not resumed till 1887, when four missionaries landed in Efate, accompanied by a Pro-Vicar of the New Hebrides. A second and more important post was founded in Malekula, whence missionaries were dispatched at intervals to several of the smaller as well as the larger islands.

(3) BEGINNING OF COMMERCIAL INTERESTS

While the missionaries were endeavouring to teach and civilize the natives, French and British traders began to visit the islands in search of gain. After the whalers who established fishing stations, came traders in search of sandal-wood, who cut down and destroyed whole tracts of valuable timber. Finally, the recruiters of native labour arrived from New Caledonia, Queensland, Fiji, Samoa, Honolulu, and even more distant islands. The visits of these ships were dreaded by the natives, who were in many cases carried off by force in large numbers. The story of these slave-raids, which reached their height in the sixties, aroused indignation in Australia, and petitions were sent to the British Government to secure the cessation of the horrors. The growing needs of the sugar-planters of Queensland, on the other hand, demanded large supplies of labour, which was at first recruited with considerable cruelty. 'The exasperation of the natives is very great,' wrote Bishop Patteson in 1870. 'They are talking of reprisals, and attack the ships without distinguishing between friend or foe.' A year later he was murdered.

The colonization of the islands did not begin till the last quarter of the nineteenth century. French interests were so small that, when France annexed New Caledonia in 1853, she considered it unnecessary to include the New Hebrides, believing that they could be taken later if desired. It was only during their visits to the remotest parts of the islands that the recruiters of labour discovered their potential wealth in copra and other tropical produce; and some of them exchanged recruiting for settlement. To supply these pioneers and to market their wares a few commercial houses opened branches in Efate, where several French and British planters and traders had settled. As the settlements increased, communications were opened up with Numea (Nouméa), the capital of New Caledonia, two hundred miles to the south-west.

(4) BRITISH AND FRENCH INTERESTS IN THE NEW HEBRIDES. DIPLOMATIC NEGOTIATIONS

The rivalry of British and French missionaries, traders, and settlers differed in intensity at different times and in different islands; but it was generally agreed that the archipelago should be annexed by one or other Power. Indeed, the British settlers in Tana and Efate demanded annexation to France in 1875 and 1876, on the ground that the archipelago was a geographical and commercial adjunct of New Caledonia; and the movement was vigorously supported by Mr. Higginson, an energetic Irish trader who had been naturalized and lived at Numea since 1859. On the other hand, a movement towards annexation in the Pacific by Great Britain was set on foot in 1871 by the Methodist missions in Australia. Fiji was annexed in 1875, and in 1877 John Paton, one of the best-informed of British missionaries in the New Hebrides, demanded their annexation at a meeting at Melbourne.

On receiving information of the growing ferment of opinion in Australia, the French Government sent the following dispatch to the British Foreign Secretary:

> *January* 1, 1878. Commercial relations have been established between New Caledonia and the New Hebrides, which have rapidly developed, and which possess considerable importance for the prosperity of our colonial empire. My Government, which strongly desires that these relations should continue on the same footing, is somewhat alarmed by a recent movement of opinion in Australia. The press has denounced the intention, which they attribute to France, of annexing the New Hebrides, and demands that in order to prevent this step the archipelago should be placed under the sovereignty of the British crown. Without attaching too much importance to this movement of opinion, my Government feels bound to declare that, for its part, it has no designs on the independence of the New Hebrides; and it would be glad to know that the Government of Her Majesty is equally disposed to respect it.

On February 20 Lord Derby sent the desired reply:

> I have the honour to inform Your Excellency that it is not the intention of Her Majesty's Government to propose to

Parliament measures of a nature to modify the independence which the New Hebrides at the present possess.

The arrangement was obviously a temporary one, and traders of both races endeavoured to create as many national interests as possible in the archipelago. In 1880 the Governor of Fiji was made High Commissioner for the Western Pacific, and his orders were executed by a British warship which was told off to patrol its waters. A French counterblow was struck in 1882 when, under the auspices of the indefatigable Higginson, the Compagnie Calédonienne des Nouvelles-Hébrides was founded at Numea. The object of the company, which selected Efate as the theatre of its operations, was to ensure the preponderance of French interests in the archipelago by the purchase of unoccupied lands and of any British property which came into the market, by the encouragement of immigration, and by the development of ports and communications. In 1884 the Australians retaliated by founding an Anglo-Australian Company, which chose Malekula as its headquarters. On hearing of this step, Higginson, accompanied by French officers, promptly sailed to Malekula in order to purchase the land surrounding Port Sandwich, and thereby to block the settlement contemplated by the new company. A ‘ treaty ’ was quickly arranged, by which the chiefs demanded the protection of the Compagnie Calédonienne and of France, promising in return to protect the agents of the company and to observe the laws of France. The Australian missionaries at once petitioned Lord Derby, the Colonial Secretary, to proclaim a protectorate; and, when a rumour arose that New Caledonia was about to export its surplus convicts to the New Hebrides, a demand was made in the Parliament of Victoria for the renunciation of any such design. The other Colonies expressed the same opinion, and the Prime Minister of Victoria informed the British Government that the Australian

Colonies were ready to meet any expenses involved in taking possession of the archipelago. The reply of the British Government, after consultation with Paris, was that the self-denying ordinance of 1878 must be maintained.

(5) ANGLO-FRENCH AGREEMENTS, 1887–8

This decision failed to tranquillize colonial opinion, which continued to press the Home Government with complaints as to the escape of convicts from New Caledonia. In 1885, accordingly, Lord Lyons presented a note requesting that the French convicts should no longer be sent thither. The ensuing discussions examined the possibility of territorial exchanges; but it was found impossible to reach agreement. While the Government was attempting without success to discover a solution, the situation in the islands was becoming intolerable. Several agents of the Compagnie Calédonienne having been murdered by the natives, a detachment of troops was sent from Numea in 1886 to Efate and Malekula, where they remained for two years. This step was generally regarded in the islands as a preliminary to annexation by France; but the Governments were still afraid of the consequences of decisive action. Further discussions resulted in an Anglo-French Convention, signed on November 16, 1887, supplemented by a joint declaration of January 26, 1888.

> I. A Joint Naval Commission (ran the Declaration) shall be immediately constituted composed of naval officers belonging to the British and French naval stations in the Pacific, charged with the duty of maintaining order and of protecting the lives and property of British and French subjects in the New Hebrides. II. The said Commission shall be composed of a President and two British and two French naval officers. . . . The President shall be in alternate months the Commanding Officer of the British and French naval forces respectively present in the group. . . . The Commission shall assemble at the request of either Commanding Officer. . . .

An Annex added Regulations for the guidance of the Commission:

1. In the event of a disturbance of peace and good order in any part of the New Hebrides where British or French subjects may be settled, or in any case of danger menacing the safety of life or property, the Commission shall forthwith assemble, and take such measures as it may think best under the circumstances for repressing the disturbance or for the protection of the interests endangered.

2. No British or French Naval Commander shall take independent or isolated action, except as hereinafter mentioned.

3. Military force shall not be resorted to unless the Commission shall consider its employment to be indispensable.

4. In the event of the landing of a naval or military force, such force shall not remain longer than may be considered necessary by the Commission.

5. Where the circumstances may not admit of any delay, . . . the British and French Commanders nearest the scene of action shall, in concert if possible, or separately if such concert be not practicable, take the necessary measures for the protection of the interests endangered, and shall report such action forthwith to their respective Senior Naval Officers on the Station, and await the further orders of the Commission. Each Senior Naval Officer, on receiving such report, shall at once communicate it to the other.

6. The Commission shall have no further or other powers than are expressly delegated to it by these Regulations, and shall not interfere in disputes concerning the title to land, or dispossess of their lands any persons, natives or foreigners. (Hertslet's *Treaties*, xviii. 392–3).

This Mixed Commission was the first attempt by the British and French Governments to introduce orderly rule into the archipelago; but its powers were too narrowly limited to fulfil the hopes to which its creation gave rise. Equally impotent to prevent or to repress conflicts, it was condemned by both races; and the naval officers performed their distasteful police duties without zeal or conviction. The impotence of the Commission was quickly revealed; and in 1888 Great Britain sent to Efate an agent with consular prerogatives, whose recommendations, after his withdrawal in 1890, formed the basis of an administrative code of 146 articles published in 1892. This 'Pacific Order in

Council', as it was called, extended the powers of the High Commissioner, and allowed him to delegate part of his authority to a Judicial Commissioner, who was to hear and to decide the claims of British settlers and traders in the Pacific for the protection of their persons and property. It was not, however, till 1902 that a Deputy Commissioner was appointed to reside in the islands. Following the British precedent after an interval of several years, the French Government conferred on the Governor of New Caledonia in 1901 the title of General Commissioner for the Pacific, with the same powers as those enjoyed by the Governor of Fiji; and in 1902 a Deputy Commissioner was appointed for the New Hebrides. Thus the rivalry continued, and the lack of an organized administration was felt more keenly than ever.

(6) THE CONDOMINIUM

On April 8, 1904 an Anglo-French declaration was signed 'concerning Siam, Madagascar, and the New Hebrides'. The part relating to the New Hebrides was as follows:

> The two Governments agree to draw up in concert an Arrangement which, without involving any modification of the political *status quo*, shall put an end to the difficulties arising from the absence of jurisdiction over the natives of the New Hebrides.
>
> They agree to appoint a Commission to settle the disputes of their respective nationals in the said islands with regard to landed property. The competency of this Commission and its rules of procedure shall form the subject of a preliminary Agreement between the two Governments.

The two Governments being subsequently in correspondence with regard to the land claims and the establishment of a Lands Claims Tribunal, and representatives having been named to discuss the matter, the French Government in December 1905 suggested that the scope of their inquiry should be enlarged, so as also to discuss the best means of terminating the difficulties caused by the absence of jurisdiction over the natives.[1] In the previous August the Australian Prime Minister had written that 'a permanent joint Protectorate, representative of both countries, founded upon conditions giving security for investment and settlement, preventing any preferences being granted to settlers of a particular nationality, and establishing a government capable of protecting the natives, securing religious liberty, and fostering civilization in the group, would certainly be preferable to the state of affairs that now prevails';[2] and, though the suggestion was expressly stated to be 'tentative'—for the Australians held from first to last that the only satisfactory solution was annexation by Great Britain—it seems to have been understood by the British Government as a formal approval of a Condominium. New Zealand, on the other hand, was in favour of partition if exclusive possession of the New Hebrides could not be obtained by concessions elsewhere. The negotiations with regard to a Convention were carried through without the presence of Australasian advisers;[3] and though the final agreement required their formal approval, they were, in effect, told that it represented the best terms that were possible, and must be accepted or rejected as a whole.[4] Nevertheless, certain amendments were suggested by the Australasian Governments. Meanwhile, 'large interests, other than British or French, were being created in

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[1] *Parliamentary Papers*, 1907, *Correspondence relating to the Convention with France dated Oct. 20, 1906, respecting the New Hebrides*, Cd. 3288, p. 6.

[2] Ibid., p. 3.

[3] Sir J. Forrest was, however, informally consulted. *Colonial Conference*, 1907, p. 562.

[4] Mr. Deakin on p. 554 of *Colonial Conference*, 1907.

New Hebrides '[1]; and, 'in order to avoid possible complications', it was decided at once to ratify the draft Convention.[2] In these circumstances the Commonwealth Government could only acquiesce, leaving the whole responsibility with the Home Government.[3] The Draft Convention,[4] dated February 27, 1906, was formally confirmed by a Convention of October 20, 1906, and ratified in January 1907. It was followed by rules respecting the Mixed Tribunal (May 17, 1907), by exchange of notes on August 29, 1907, and by joint and separate instructions to the French and British High Commissioners.[5]

The Condominium applies to the whole territory of the New Hebrides, including the Banks and Torres Islands; but each Power retains its separate jurisdiction and control over its own subjects or citizens. No fortifications can be erected in the group; and no penal establishment of any kind can be established. Such public services as police, posts, and telegraphs, public works, ports and harbours, buoys and lighthouses, public health and finance, are undertaken in common; and common expenses are met by taxes imposed by the High Commissioners jointly.

The regulation of native affairs belongs to the High Commissioners jointly, who are 'to respect the customs and manners of the natives, when not contrary to the maintenance of order and the dictates of humanity '.[6]

(7) Question of Claims to Land

The most difficult question to be dealt with was the principle on which claims to land were to be settled.

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[1] Cd. 3288, pp. 37–50.

[2] Ibid., p. 50.

[3] Ibid., p. 52.

[4] Ibid., pp. 14–35.

[5] *Treaty Series*, No. 3, 1908. *Exchange of Notes between the United Kingdom and France*, Cd. 3876.

[6] Article VIII.

The Compagnie Calédonienne des Nouvelles-Hébrides had been active since 1882 in acquiring native lands. At the time of the Convention it was the apparent owner of at least 784,000 hectares. The largest claim of any one British company did not amount to more than 81,000 hectares.[1] The British contention, following New Zealand and Fiji precedents, was that purchases made before the institution of the Condominium were not valid in law, but must be the subject of revision under a special commission of inquiry. (It must be admitted that Australian interests in this matter coincided with those of the natives.) The French contention was that the natives had been free agents, and that, in the absence of fraud, land sales must be considered binding.

A compromise was arrived at, under which the burden of proof was thrown upon the party desiring to upset the contract; valid grounds being insufficiency of signatures, ignorance on the part of the seller, fraud, violence, or bad faith on the part of the purchaser, failure to fulfil necessary conditions, and want of title in the seller. Occupation without title was held good, when it was *bona fide*, had been in existence at least three years, and had been supplemented by building, planting, &c.[2] In case of failure of title a *bona fide* occupier was given, after eviction, the right of preemption in the event of the land again being for sale.[3] Land reserved for the natives remained inalienable until the Joint Court or High Commissioners cancelled or modified their decisions.[4]

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[1] N. Politis, *Le Condominium franco-anglais des Nouvelles-Hébrides*, p. 64.

[2] Article XXII.

[3] Article XXIV. On the whole subject see Chapter V of *Le Condominium franco-anglais des Nouvelles-Hébrides*.

[4] Article XXVII (9).

The Joint Court constituted under the 1906 Agreement consists of three judges, together with a public prosecutor. One of the three judges is appointed by each Government; the third, who is President of the Court, is a subject of a neutral nation, appointed by the King of Spain, and the public prosecutor is also a neutral subject. A distinguished Spaniard, the Conde de Buena Esperanza, accepted the position of President of the Supreme Court.

(8) QUESTION OF NATIVE LABOUR

Another difficult question was that of the recruitment of native labourers. The New Hebrides had been a recruiting ground for planters in Queensland, Fiji, and New Caledonia. In spite of the provisions of Imperial and Queensland Acts of Parliament and of the Decrees of French Commissioners, abuses continued to exist. In a period of 30 years the Queensland plantations had absorbed some 50,000 *kanakas*, of whom no less than 10,000 died during their period of indenture. Meanwhile, the population of the New Hebrides dwindled to one-fourth or one-fifth of what it was formerly.[1] Queensland and Fiji no longer required *kanaka* labourers, and the Australian Government suggested that New Caledonia should also be debarred from importing them.[2] This proposal did not take effect, but elaborate provisions were made to render harmless the working of the system.[3]

(9) NEGOTIATIONS IN 1914

In June 1914, French and British delegates met in London with a view to improving the system introduced in 1906. Neither of the two parties to the Convention of that year was prepared to cede its rights and interests, and the division of the islands was not discussed. The task of the delegates was to correct the defects of the Condominium and to amplify the provisions of the Convention in the light of the experience of eight years' working. From the outset a certain divergence in the point of view of the two delegations was apparent. The British were anxious to remedy the evils arising from joint control by increasing the scope and the powers of the joint authority, both administrative and judicial, and thereby limiting the scope and powers of the National Administrations and National Courts. The French, on the other hand, laid great stress on the retention by each Power of the sovereignty over its own nationals expressly recognized by Article I of the Convention of 1906. The general principles of French law applicable to colonial possessions rendered it more difficult for France than for Great Britain to consent to any derogation from national authority; and certain proposals put forward by the British delegates would have required legislation in the French Parliament which, they were informed, had no prospect of being passed. Despite the limitations, however, under which the British delegates were compelled to work, and the compromises which they were obliged to accept, the Protocol signed on August 6 embodied substantial improvements of the existing machinery.

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[1] Politis, op. cit., p. 84. See also Report of Sir Everard im Thurn, Cd. 3288, p. 75.

[2] Ibid., p. 42.

[3] Articles XXXI—LVI.

Among the very numerous agreed amendments the following may be mentioned. The period within which the subjects of third Powers must opt for the British or French system is reduced from six months to one. The authority of each Power over corporations no less than over individuals is expressly asserted. Foreign labourers introduced into the islands by the authority of either Power are to be regarded as dependants of that Power during their residence—a provision necessitated by the introduction of indentured labourers from Java under French auspices. Two agents, one British and one French, are to be appointed for each district, dividing between them the work of native administration, exercising authority over their own nationals, making joint tours of inspection, and reporting to both Resident Commissioners. The list of joint services is extended to include the Joint Court, the Courts of First Instance, Native Courts, Joint Native Prisons, the Land Registry, the service of the administrative districts, and the Department of Survey.

A code of native law is to be prepared, and Native Courts are to be established under the presidency of the Condominium agents, for dealing with the offences of natives against natives. The jurisdiction of the Joint Court is largely extended, its members receiving power to deal with serious offences by natives against natives, and to review the decisions of Native Courts. The relations between the Joint Courts and the National Courts are regularized. All charges justiciable by a Joint Court against any subject of either Power are to be brought to the notice of his national authorities; and when the charge has come before the Joint Court suitable action by the national authority is to follow as a matter of course. The Joint Court receives power to sentence offenders to imprisonment in default of payment of fines and to issue warrants of arrest, the latter prerogative not having been hitherto recognized in the case of French citizens. The Native Advocate, who had hitherto appeared in court only when expressly requested by the natives, is now bound to appear on behalf of all natives concerned in civil and criminal proceedings before the Joint Court; and he may also appear when a native is concerned in a case in the National Courts. In view of the fact pointed out by the President of the Joint Court, that in many cases the judgement of the Court had not been executed, the principle of joint execution by the two national authorities is accepted. To relieve the pressure on the Joint Court, and to meet the needs arising from the infrequent and uncertain means of communication between the islands, local Resident Magistrates, with power of summary jurisdiction, are to be appointed. A complete system of registration of titles to land is to be introduced, and steps are to be taken to check the advance of fraudulent claims based on occupation. New safeguards are introduced with regard to the recruitment, engagement, and employment of native labour. The issue of recruiting licences is entrusted to the Resident Commissioners alone, and cases of violence and fraud are to fall within the jurisdiction of the Joint Court. The Resident Commissioners may prohibit or restrict recruiting in any area, owing to the presence of unrest or the decline of the population, and recruiting operations are to be supervised by a competent authority in the actual district where it is taking place. Restrictions are placed on the recruitment of women. Each Power is to appoint inspectors of labour.

The signature of the Protocol synchronized with the outbreak of war, and no further action has been taken; but it stands on record, to be ratified and put into practice hereafter if existing political conditions remain unaltered. In the opinion of the British delegates it constituted 'a substantial advance' on the provisions of the Convention of 1906; and they expressed their belief that the cordial spirit in which the discussions were carried on would be reflected in improved official relations.

III. SOCIAL AND POLITICAL CONDITIONS

(1) SOCIAL AND RELIGIOUS

THE archipelago is inhabited by about 65,000 natives of Melanesian race with a slight mixture of Polynesian blood. Their numbers have rapidly decreased since the coming of the white man and are still diminishing. They belong to a singularly low human type, and are described as fierce and treacherous by the earlier missionaries, who have at times almost despaired of their task. Fighting has been common till recently, and poisoned arrows are used in the tribal wars. The women occupy a degraded position; and in some islands widows are buried alive with the bodies of their husbands. Infanticide is common; and old and helpless parents are sometimes killed off. No common sentiment unites the natives, who are divided not only by caste and totems but by difference of tongues. Their savage instincts were inflamed rather than repressed by the arrival of the white man in their islands, and the cruelties of the early traders and recruiters or kidnappers of labour were revenged not only on their successors but on the missionaries. No real native polity exists, and most of the chiefs possess but little power. Customs and superstitions vary from island to island and often from village to village; but belief in sorcery and omens is general. Prayers and offerings are addressed to the spirits of the recently dead; and another class of spirits is held to exist in certain stones and animals. Their religion may be roughly described as composed of the dread of evil spirits, fetishism, and the worship of ancestors.

While the traders, kidnappers, and liquor-sellers have further degraded the inhabitants, the missionaries have laboured with zeal and success to civilize them. They have proved themselves the best friends both of the natives and of the white man; for it is owing to them alone that life on the islands has become possible for European settlers. For a time the inhabitants made no difference between their enemies and their friends, and impartially murdered trader and missionary; but the influence of example and teaching has tamed them, and to-day the white man has little to fear except when the native possesses fire-arms, and is under the influence of drink. The first step away from heathenism is taken when the convert is induced to wear clothes. Mr. Jacomb[1], a barrister formerly of Vila who writes with considerable authority, pronounces mission work the one bright spot in the history of the New Hebrides.

The merit of this achievement is shared between French and British, Catholic and Protestant missionaries; but the larger share falls to Scottish Presbyterians, who have worked for a longer period, have been far more liberally supported with funds, and have opened a larger number of schools. The Presbyterian Mission combines medical work with its other functions, and has established hospitals in the larger islands. It possesses a training college for teachers, and the missionaries have mastered a number of the native languages, thereby establishing communication on subjects which the resources of *bêche-de-mer* English, the *lingua franca* of the archipelago, are too limited to express. The next task before the missionaries is to organize industrial training. The converts to Christianity number to-day about one-third of the population.

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[1] *France and England in the New Hebrides*, Melbourne, &c. [1914], quoted by B. Fletcher, *The Problem of the Pacific*, pp. 164–7.

(2) POLITICAL

The Condominium roughly corresponds to existing facts. New South Wales has the larger share of the commerce of the islands. On the other hand the French, led by the New Hebrides Company, have been far more active in acquiring land, though many of the claims at present only exist on paper. French and British settlers, traders, and missionaries are to be found on all the important islands. For details of the administration, see above, pp. 14–21.

II. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) *Rivers*

On Espiritu Santo the River Sarakata has shallow water on the bar at its mouth, but is navigable for small craft to nearly three miles above that point.

(2) *Ports*

There are numerous good harbours, especially for small vessels. Without shelter, landing is frequently impossible, or at least dangerous on the weather side of the islands. The best harbours are Port Aneityum in the island of that name, Vila (Fila) and Havannah Harbours in Efate Island, and Port Sandwich in Malekula. Segond Channel, Hog Harbour, and Port Olry in Espiritu Santo are also good. In the Banks Islands the only harbours are Port Patteson in Vanua Lava and Dives Bay in Ureparapara Island. There are one or two fairly good but small anchorages in the Torres Islands, the best being Hayter Bay in Tegua Island. Pigs, goats, and fowls can be obtained at most of the islands, besides vegetables and fruit.

Havannah Harbour.—Havannah Harbour, like Vila, is well sheltered, but so deep that there are few spots where anchorage can be obtained. It has an area of 6½ square miles navigable for the largest ships. Supplies are not plentiful.

Port Aneityum.—The harbour at this place is easy of access, but, being open to the west, is considered not to have very good anchorage. It is, however, well sheltered from April to October, when the south-east trade wind blows steadily, and it can accommodate large vessels. It is connected with several other places in Aneityum by telephone and road.

Port Patteson.—The harbour here consists of two bays called North Bay and South Bay respectively. The South Bay affords the better anchorage, which, however, is described as only moderately good.

Port Sandwich.—This is the best harbour in the New Hebrides. It is about 4 miles long, by about ¾ of a mile in average width, and is very well protected and easy of access, with good holding-ground in reasonable depths. There is a short stone pier. Supplies, including coal, may be obtained in small quantities.

Ureparapara.—The interior of the submerged crater which forms this island is said to make an excellent harbour, called Dives Bay, but it is exposed to the north-east.

Vila Harbour (*Franceville*).—This is a deep harbour, well sheltered except from the west. As its area is over 2 square miles, it could accommodate many big vessels at a time. There is a pier served by a tramway. Meat, vegetables, and water are obtainable in small quantities. Two coal hulks are moored in the harbour, but the amount of coal in stock is not known. Vila is the only port of entry in the New Hebrides.

(3) *Shipping Lines*

Communication with Australia is afforded every five weeks by vessels belonging to Burns, Philp & Co., and every month by those of the Messageries Maritimes. The vessels of Burns, Philp & Co. call at all ports in Epi, Malekula, Ambrym, and Espiritu Santo. There are other small steamers carrying on inter-insular trade. The Messageries Maritimes receives a subsidy of £15,000 a year from the French Government in respect of its Pacific Islands service *via* Numea.

(B) INDUSTRY

(1) Labour

A great obstacle to the economic progress of the islands is the difficulty of obtaining sufficient labour. The shortage is partly due to the recruiting of labour in the past for Queensland, Fiji, and New Caledonia, which caused a permanent decrease in the population; but the inhabitants are still numerous enough to furnish an adequate local supply of labour if only their services could be made available. But those who live on the windward side of the islands are difficult to reach, owing to the dangers of navigation, and moreover the people of the southern islands refuse to work in the north. Consequently, the sources from which the colonists can draw labour are extremely limited, and many colonists feel that the only satisfactory solution of the problem lies in the introduction of foreigners.

(2) Agriculture

(a) *Products of Commercial Value*

The chief products of the islands are copra, cotton, coffee, maize, and cocoa.

The coco-nut palm is not extensively cultivated by the colonists, and most of the copra exported is prepared from coco-nuts self-planted.

The cultivation of cotton was only started in 1911, but it has now become one of the chief articles of export of the islands.

The production of coffee is increasing, though it has recently suffered very considerably from the ravages of the pest *Hemileia vastatrix*.

Cocoa is grown in steadily increasing quantities. It has been stated that the soil of these islands and the character of the climate are well adapted to its cultivation, which should be greatly extended in future.

Bananas, vanilla, sugar, and tobacco are also cultivated, in small quantities, and, in the Banks Islands, nutmegs and pepper. There are also native crops of plantains, bread-fruit, pine-apples, sago, yams, taro, and arrowroot. The native plantations are well tended, and on Aneityum the natives have extensive irrigation works.

Before the outbreak of war, cultivation by the British colonists was confined to maize and coco-nuts. Later information is not available. The remaining products were for the most part in the hands of the French, who greatly outnumber the British (see p. 5).

(*b*) *Forestry*

Thick forests cover most of the islands. The forests contain several useful timber trees, including sandal-wood, *tamanu*, and a variety of *kauri* pine. Sandal-wood has long been sought after but is now far less abundant than formerly. Rosewood occurs in the Banks Islands.

(*c*) *Land Tenure*

The land actually occupied by French planters amounts to 62,000 acres, of which about 15,000 are at present under cultivation. No information is available as to the amount of land owned by British colonists. Of the 62,000 acres occupied by the French, two proprietors on Efate Island own nearly 30,000. The titles to property in the islands are very diverse and, as elsewhere in Oceania, give rise to continual litigation. The impossibility of obtaining satisfactory titles has proved a serious obstacle to the development of the resources of the island. The Société Française des Nouvelles-Hébrides, which was founded in 1894 as a general agricultural development company, with a capital of 200,000 francs, claims some sort of proprietary rights over nearly half of the total area of the islands; of the 62,000 acres now under French occupation, the company itself exploits some 8,500 acres, whilst it has leased 19,015 acres to colonists.

(3) FISHERIES

The Banks Islands have some mother-of-pearl fisheries.

(4) MINERALS

Copper and nickel ores and gold have been reported, the last from Omba (Aoba), but there is no information as to the nature of the deposits, none of which have been worked. Deposits of sulphur have been found on Tana and Vanua Lava. The Tana deposits have not been worked. Efforts made about eighteen years ago to work the Vanua Lava deposits failed, partly through mismanagement and partly, it is said, owing to the inadequacy of the supply of sulphur.

(C) COMMERCE

(*a*) *Exports and Imports*

The trade of the islands is steadily increasing. The figures for the principal exports of the New Hebrides in recent years are as follows:[1]

	1914.		*1915.*		*1916.*	
	Tons.	*Value.* £	*Tons.*	*Value.* £	*Tons.*	*Value.* £
Cocoa	43	3,135	77	5,671	225	19,232
Coffee	148	10,837	372	27,233	265	19,401
Copra	3,284	66,670	4,029	81,802	4,104	83,332
Cotton	681	13,825[2]	1,557	31,625	1,726	35,038
Maize	458	22,794	1,489	9,074	1,525	7,649
Sandal-wood	100	2,868	105	3,016	134	4,384

[1] These figures are taken from the *Report of the Inter-State Commission of Australia on British and Australian Trade in the South Pacific* (1918). They do not everywhere agree with the figures as given in the *Statistiques du Commerce des Colonies françaises* (1914).

[2] The *Statistiques du Commerce* give 546,552 francs (£21,500) as the value of the export of raw cotton from the New Hebrides to Numea (New Caledonia) alone in 1914.

The principal product exported is copra, but the export of cocoa and cotton is increasing, and that of coffee, though its record is less consistent, also tends to grow. The exports are mostly shipped to New Caledonia and Australia. In 1914 the value of the goods sent to the former was £69,300, and in 1916 £125,000. The exports to Australia in 1914–15 (July to June) were valued at £22,668.

The imports of the New Hebrides were valued in 1916 at £90,000. In 1913, however, the value of the goods imported from Australia alone was £96,354, of which £34,000 was accounted for by goods of Australian origin. In 1914–15 the corresponding figures were £50,000 and £19,900.

The trade of the islands with New Zealand is negligible.

(*b*) *Customs and Tariffs*

The tariff is fixed and administered jointly by the British and French authorities. There are special rates for certain articles, and a few enter free; all other imports pay a 10 per cent. *ad valorem* duty.

Of the exports from the islands, maize and coffee have special advantages. The Australian Government at present refunds half the duty on maize imported into Australia, if grown by British planters in the New Hebrides, and grants a bonus of £4 per ton on imported coffee of like origin. The French planters, in their turn, benefit from an arrangement whereby for a specified period maize grown by them is admitted free into New Caledonia up to a quantity of 1,800 metric tons, while their coffee, up to 50 metric tons, is exempt from duty in other French colonies.

(D) FINANCE

No information is available as to the cost of the administration of the islands.

British coin and notes are current, though scarce; French coin and notes are current and plentiful. There are no banks.

(E) GENERAL REMARKS

There is little doubt that these islands are among the most fertile in the Pacific, but their development is at present hindered by the insufficiency of labour and, in a minor degree, by the impossibility of securing a clear title to land and the consequent difficulty in obtaining financial assistance from banks or commercial houses. Their general importance is to be found largely in the fact that they possess three of the best harbours in the Pacific.

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MAPS

The Naval Staff Intelligence Division have issued a map of the New Hebrides, Banks, and Torres Islands, on the scale of 1 : 3,000,000 in connexion with this series. Their position relative to other islands is shown in Stanford's Map of the Pacific Islands (see note to No. 139).

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